1-1-2006

# Development and evaluation of the student-counselor social capital instrument.

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# DEVELOPMENT AND EVALUATION OF THE STUDENT-COUNSELOR SOCIAL CAPITAL INSTRUMENT

A Dissertation Presented

by

JAMES HARRITY

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

February 2006

School of Education

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# ACKNOWLEDGMENTS

I am writing this acknowledgement at the end of this doctoral journey with a tremendous gratitude for the people who were put in my life along the way. I am a lifelong learner and this phase of my education has been a transforming experience. I consider it a gift and a privilege to have met and studied with people from all over the world trying learn and to help others to learn.

First I would like to acknowledge the institution of public higher education. This public resource allows people more than just the opportunity to put themselves through college and obtain advanced degrees. Public higher education allows us to beat the odds in many meaningful ways.

Second, I would like to acknowledge my committee members. Bob Marx's professionalism and commitment will always be appreciated. Alfred Karlson's continued presence for me has been a blessing. His scintillating wit has been an inspiration from day one. I would like to give a special acknowledgement to Jay Carey for taking a chance. His powerful intellect and thoughtful advice has been a compass keeping me on track. Jay has made a difference in my life and I hope and look forward to take on the next set of challenges with him.

Words cannot express the love and support my wife Tracy has given me all these years. She has always believed in me and she has made a lot of sacrifices for me and our family. Acknowledgement seems like an insufficient word to express my thanks. My love and appreciation for Tracy is ineffable. Also, to my boys Simon and Macklin, I hope and pray that my pursuits and dreams help you to beat the odds, whatever they may be.

ABSTRACT

DEVELOPMENT AND EVALUATION OF THE STUDENT-COUNSELOR SOCIAL CAPITAL INSTRUMENT

FEBRUARY 2006

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The ASCA National Model for School Counseling Programs and the Education Trust's Transforming School Counseling Initiative indicate the importance of school counselors being heavily involved in eliminating disparities in achievement. Social Capital theory presents a rich framework for understanding how school personnel can reduce the achievement gap by serving as a source of resources for disadvantaged students. By providing resources that are not available in challenged families or communities, school counselors can empower students and help them succeed. Application of social capital theoretical constructs to school counseling practice and research is hampered by a lack of exact definitions and measurement instruments. Therefore, the purpose of this research is to develop and evaluate a theory based instrument. The School Counselor Social Capital Instrument applies five constructs from Coleman's social capital model to school counseling. Four hundred and twelve high school students took the survey. The scales proved to have high reliability, are related yet discriminable, and a three factor solution proved to be interpretable. Social Capital theory and the School Counselor Social Capital Instrument can help counselors

become leaders, change agents, and advocates for the elimination of systemic barriers that impede academic success for all students.

TABLE OF CONTENTS

LIST OF TABLES

## LIST OF FIGURES

FIGURE Page

# CHAPTER 1

## INTRODUCTION

The purpose of this research is to develop and evaluate an instrument named the Student-Counselor Social Capital Instrument (SCSCI) that measures the social capital in the student-school counselor relationship. The SCSCI is based on James Coleman's theory of social capital and is a paper-and-pencil survey that is administered to high school students. James Coleman (1988) states that social capital is not completely tangible, that it exists in the relations among people, and that it can facilitate productive activity. The extant research on social capital indicates that there is a positive relationship between social capital and educational outcomes. However, there are currently no studies that address social capital and the student-counselor relationship, and there are conceptual and measurement limitations to the existing research. Therefore, there is a need for research on social capital and school counselors that addresses some of the limitations.

Schools across the nation are being held more and more accountable for student success. And, according to House and Hayes (2002), closing the achievement gap between poor students and students of color and their more advantaged peers is the focused mission of schools today. Hence, school counseling programs are being scrutinized by administrators and boards to determine their effectiveness in meeting the overall objectives of the school.

A social capital review of school counseling practices can help counselors determine what works best to ensure an equitable distribution of school resources. Social capital examines issues of trust, expectations, networks, and exchange of

information. A social capital perspective can help identify barriers to student success and help facilitate the flow of school resources from institution to student. However, before this important work can be done an adequate measure of social capital is necessary.

Social capital can be described as social relationships and structures that function as resources and that facilitate productive activity (Croninger, 1997). The opportunity for students to have meaningful interaction with teachers and counselors is an example of social capital. Instrumental interaction with these educators can create access to important information about school or community that can increase the students' chances of success. For example, information counselors provide to students about school to work programs or college admissions can create opportunities for students who have access to this information.

A social capital perspective on school counseling activities highlights the need of poor students and students of color for committed and caring relationships with adults. These students have a greater need than their more advantaged peers for advocates and mentors because they often lack family and community members who can fill these roles (House & Hayes 2002). Croninger (1997) states that less advantaged students see more gains from these types of relationships than those of their more advantaged peers.

Other research confirms that community social capital can compensate for the lack of social capital in the home (Furstenburg & Hughs, 1995; Smith et al., 1992; Hao & Bonstead-Burns, 1998; Isreal, 2001; Croninger, 1997; Stanton-Salazar, 1995, 2001; Parcel & Dufur, 2001). Community social capital in the form of good schools, help

networks, and high expectations has positive effects on pro-social behavior and academic achievement. This is critical for school counselors to understand because they are in a unique position to create social capital for students who may not possess capital in the home.

The achievement gap exists because we continually expect less from poor and minority students (House & Martin, 1998). Low expectations of students is an institutional barrier to student success, and high expectations for all students unlocks institutional resources unavailable to students because now they are expected to take full advantage of the resources offered. For instance, if all students are expected to do well, then tutoring and study skills workshops become available to all. If students are not expected to do well then counselors become gatekeepers and sorters, determining who gets access to resources and who does not.

Lack of trust between students and school personnel is another constraint on students' success (Stanton-Salazar, 2001). Stanton-Salazar identified students who do not trust their teachers and counselors as having a defensive network orientation. This orientation is developed when students seek help from school personnel but do not receive it. Yet, once again, in Stanton-Salazar's research we see that social capital in the form of high expectations and trusting relations can have positive effects on the academic achievement of the less advantaged students.

Counselors must work as change agents and advocates for the elimination of systemic barriers that impede academic success for all students. School counselors need to become leaders in overcoming the institutional barriers that continue to result in the achievement gap between poor and minority students and their more advantaged peers.

Counselors need to work proactively to remove barriers to learning by teaching students how to help themselves via improved organizational skills, study skills, and test taking skills. School counselors are also called upon to teach students and families how to manage the school bureaucracy and how to access support systems (House & Hayes, 2002; House & Martin, 1998).

House and Martin (1998) call on school counselors to help students define, nurture, and accomplish high aspirations. A social capital perspective on school counseling can help counselors determine if in fact they are fulfilling these roles. A social capital perspective can help counselors become effective change agents and help them facilitate the exchange of school resources between school personnel and all students. Trust, expectations, and exchange of information are all critical components of social capital. If counselors are to break down the institutional barriers to student success they must build trust and have high expectations.

School counselors have a school-wide perspective that puts them in a position to assess the school for systemic and other barriers that impede academic success for all students. Counselors need to be able to determine if there is an actual exchange of resources between them and all students. Resources that improve student skills and give access to support systems need to be made available to all students, and counselors need to present data to support that it is.

School counselors are in a critical position to focus on issues that will assist in closing the achievement gap. However, research documenting that students are more academically successful as a result of school counselor action is limited (Martin, 2002). The School Counselor Social Capital Instrument can help counselors discern if barriers

exist and what resources are actually getting to the student. The instrument focuses on trust, expectations, networks, and information channels. A social capital perspective and developing the SCSCI can help counselors determine if they are effective in eliminating institutional barriers and determining what resources are getting to which students. This can be an effective tool in helping close the achievement gap.

## Research Question and Expected Results

This study will address the question of whether a theory-based instrument can be developed that measures social capital by student self-report and that has reliable and discriminable scales. A pilot study was done with 156 participants and those results foreshadowed what the expected results would be of the final administration. The pilot study confirmed that a theory-based instrument can be developed that measures social capital by student self report. The instrument was derived directly from James Coleman's definition of social capital, and it demonstrates construct and face validity.

The results of the final study are expected to confirm that the scales of the instrument are reliable and discriminable. There are five scales in the SCSCI. In the preliminary version of the instrument the reliability coefficients were between .91 and .84 for all the scales except Closure which was .63. The former scales are considered to have a high degree of reliability and the latter to be moderately reliable. Therefore it is expected that the more consistent scales will stay that way and the closure scale is more likely to change.

The interscale correlations are expected to be moderately correlated, but not enough to say that they converge to one construct. The exception to that would be the

information channels and the trust scales. That correlation was .80, and the others ranged from .07 to .63. It is expected that the .80 correlation will stay high and the other interscale correlations will demonstrate discriminate validity

Factor analysis of the data is expected to yield better results than the preliminary analysis. Factor analysis was borderline to even attempt given the low number of participants (N = 156) in the preliminary version. However, with the number of participants at 412 in the final administration, the results should yield a clearer picture of the factors. It is expected that one factor may dominate the results. But, two more factors should emerge in the analysis. In the preliminary version, the first component accounted for 33% of the variance and the second and third components accounted for 11%.

The preliminary version of the instrument demonstrates that some of the limitations in the existing research can be addressed. Some of the issues that need to be addressed are conceptualization of social capital, students as agents, and exchange of resources. The conceptualization of social capital was clearly defined and confirmed by a panel of experts. Students self reporting will examine whether students are agents of social capital production. However, the N=156 in the first administration was not enough for a rigorous analysis. It is expected that, with N=400, more rigorous testing of the instrument can be done and the results are expected to show that there is an exchange of resources taking place between institutional agents and students.

Finally, it is expected that this research will demonstrate that the SCSCI is a useful research tool. If testing of the instrument demonstrates that it is sound, then the fundamental question - Will schools differ on the instrument in ways that are consistent

with social capital theory - can be answered. For instance, analyses can be done to determine if programs that implement ASCA's national model differ from programs that do not. Also, the SCSCI's utility can be in evaluating a program's effectiveness in delivering school resources to all students. ASCA's national model calls for an equitable distribution of services among students and the use of data to evaluate and implement services. The SCSCI can assist counselors in that process.

This research should also address some of the gaps in current social capital research, as described by Dika (2002), by clearly conceptualizing social capital, by understanding that the student is an agent in the creation of social capital, and by analyzing an exchange of resources in an institutional setting.

This research is also useful because it will introduce social capital theory as an organizational framework for the social structures created by school counseling programs. The multiplex and multistranded relationship of counselors with students makes counselors unique agents in the creation of social capital.

## Addressing Limitations of Existing Research

### Lack of Clear Definition

Conceptualizing social capital by applying James Coleman's theory to the student-counselor relationships should alleviate some of the vagueness of definition that is problematic in predominant social capital research. Social capital is defined as resources created by relationships that facilitate productive activity (Coleman, 1988). Five constructs were derived directly from Coleman's definition: (1) Trust, (2)

Students' Expectations, (3) Counselors' Expectations (as perceived by the student), (4) Information Channels, and (5) Closure of Social Structure.

Currently there is a paucity of instruments that attempt to measure students' social capital directly. In the aforementioned studies, social capital was operationalized many different ways. The definitions of social capital ranged from narrow family variables like divorced fathers (Furr, 1998), to broad community variables that included analyses of school bonds and tax increases (Smith, 1992). However, most of these variables are indirect measures, or proxy measures, of social capital. The researchers who produced these reports used large data sets that were not designed specifically to measure social capital.

The researchers used items from the data that they believed best represented the types of social capital they wanted to measure. For instance, Croninger (1997) created a student-teacher relations variable using factor analysis. The items for this variable consisted of questions like, "do you value students," and "are you interested in students?" These questions can be helpful, but they do not address the perceptions of the student. Other studies used proxy variables such as nationality (Lauglo, 2000) which purports to measure extended, cohesive families, and political membership (Wong, 1998), which purports to measure resources outside the family. Although most of the measures used for these studies were not direct measures of social capital, they were attempts to measure social relations that generate productive activity.

Students as Agents

Clearly defining social capital in the student-counselor relationship addresses the fact that there are no studies that examine the role of school counselors specifically in terms of social capital. There are studies that deal with student achievement and family social capital (Carbonaro, 1998; Furr, 1998; Teachman, 1996; Teachman, 1997; Valenzuela, 1994), achievement and community social capital (Furstenberg & Hughes, 1995; Hao & Bonstead-Bruns, 1998; Israel, Beaulieu, & Hartless, 2001; Smith, 1992) and social capital within the teacher-student relationship. Croninger (1997) and Stanton-Salazar (2000, 2001) mention the student counselor relationship, but counselors are then subsumed into the student-teacher relationship.

The vast majority of the prevalent research does not address the students' role in creating social capital. The extant research addresses parents, community, and school in creating capital, but not the students themselves. This research addresses this gap by surveying students directly about their perceptions of social capital indicators. A student's healthy development depends on regular opportunities to construct supportive relationships with caring significant others within the schools. If students do not receive the adult help and support they need, they face stunted development and the devastating effects of social oppression (Stanton-Salazar, 2001).

This is particularly true for low-status students. These students have the most to gain from supportive relationships, and the most to lose from the lack of supportive relationships (Croninger, 1997). In many cases, low-status students underutilize school personnel as sources of academic and emotional support (Stanton-Salazar, 1997; 2001).

Without support from teachers and counselors, these students have little access to the schools' resources. Social capital theory is one important tool that educators can use to create supportive environments for all, and to evaluate the distribution of school resources within those environments.

Examining social capital for students in schools is important because, historically, families have been the institution that prepares children for adulthood. However, economic and demographic changes have increased the importance of schools in preparing children for adult lives (Croninger, 1997). Some scholars claim that students do not possess the same amount of social capital as they used to (Fukuyama, 1999; Putnam, 1995). One popular explanation of this is that there is a general social decline (Putnam, 1995). Another explanation is that there is increased inequality (Dika, 2002). In either case it is important to understand how schools can create social capital for all students.

Exchange of Resources

Because previous studies have used inadequate measures of social capital (e.g. using indirect variables from large data sets), determining directionality or exchange of resources is problematic (Dika, 2002). The constructs on this instrument will be clearly defined and administered directly to the student. This will enable analysis to determine if there is a differentiation of access to the schools' resources, and to highlight possible institutional constraints on students receiving information. For example, students need to trust their counselor if they are to receive all the resources the counselor has to offer. Low levels of trust could hinder the exchange of resources from the school to the

student. This instrument will be able to determine if there are significantly different levels of trust between groups in the student-counselor relationships in the school or district.

Also, the information channels scale deals specifically with information that the student actually receives from the institution. This instrument should be able to decipher whether students are actually receiving institutional resources. The SCSCI asks specifically if students receive information related to the academic, career/vocational, and social domains. The results should be very clear as to whether an exchange of information has taken place.

Measuring the social capital in the student-counselor relationship will also enable an examination of school counseling programs from a more systemic perspective than the individual deficit model. Examining different levels of social capital between groups could reveal some institutional constraints on the student counselor relationship. For instance, data from the instrument may reveal that low socio-economic status (SES) white students may not be receiving the same amount of capital as other students. The area of counselor expectations may show that counselors have lower expectations for these students and therefore do not offer as much college information to them. This would be an institutional constraint on the students, not a limitation of the student. Students have often been blamed for their failure, but using social capital theory to examine the student-counselor relationship allows institutional variables to be considered when evaluating the exchange of resources between student and school.

## Rationale

The resources of the school exist for all students; however, the resources may not be reaching all students because of a combination of institutional and personal variables (Stanton-Salazar, 1997, 2001; Stanton-Salazar & Dornbusch, 1995). Developing an instrument to measure social capital will allow for an examination of these variables in relation to student success. When data is disaggregated, it may be able to tell which groups of students are benefiting from the schools' resources and which ones are not.

Counselors may not be able to control for all of the student variables that contribute to low achievement; but they can control for the institutional variables such as sorting students based on certain expectations of those students. The SCSCI is an instrument that can assist counselors in identifying which students are receiving resources and which ones are not. And, the instrument can assist counselors in determining why these students are not receiving the resources, whether it is low expectations or a lack of trust by the students.

This instrument also collects demographic information such as level of parent education, honors classes taken, reported grades, aspirations, sex, and ethnicity. When this information is analyzed with scale information such as expectations, trust, and information channels, counselors can determine which groups have high aspirations, or which groups are taking honors classes. Or more importantly they can determine which are not. Given this information counselors can develop curriculum to address some of the shortcomings revealed by the administration of the instrument.

The SCSCI has items that are associated to scales and demographics, and it also asks questions about delivery system of the resources. These questions ask about the effectiveness of the counselor's mode of operation. For instance, the SCSCI can determine if students perceived that they learned more from a one-on-one session with a counselor; or it can determine if students learned more from small groups or whole school interventions. This is important because many schools are adopting the American School Counselor's National Frameworks, which advocates for these types of delivery systems.

## The National Model and Social Capital as an Organizational Framework

The National model expands on the Comprehensive Developmental Guidance Program by advocating for all students and using data for decision making. Social capital theory is easily integrated with this framework. Comprehensive Developmental Guidance Models consist of content, organizational frameworks, and resources of programs. The content partly consists of academic, career/vocational, and personal-social domains. The organizational framework incorporates a delivery system, and the resources of the program consist of personnel trained to advocate for students and analyze data (see Figure 1).

Social capital is resources created through relationships. Multiplex relationships, multiple forms of support, and multistranded relationships, multiple roles in which to support, offer the most benefits to students (Coleman, 1988; Putnam, 1995; Stanton-Salazar, 2001). As stated earlier, the three domains of developmental guidance are

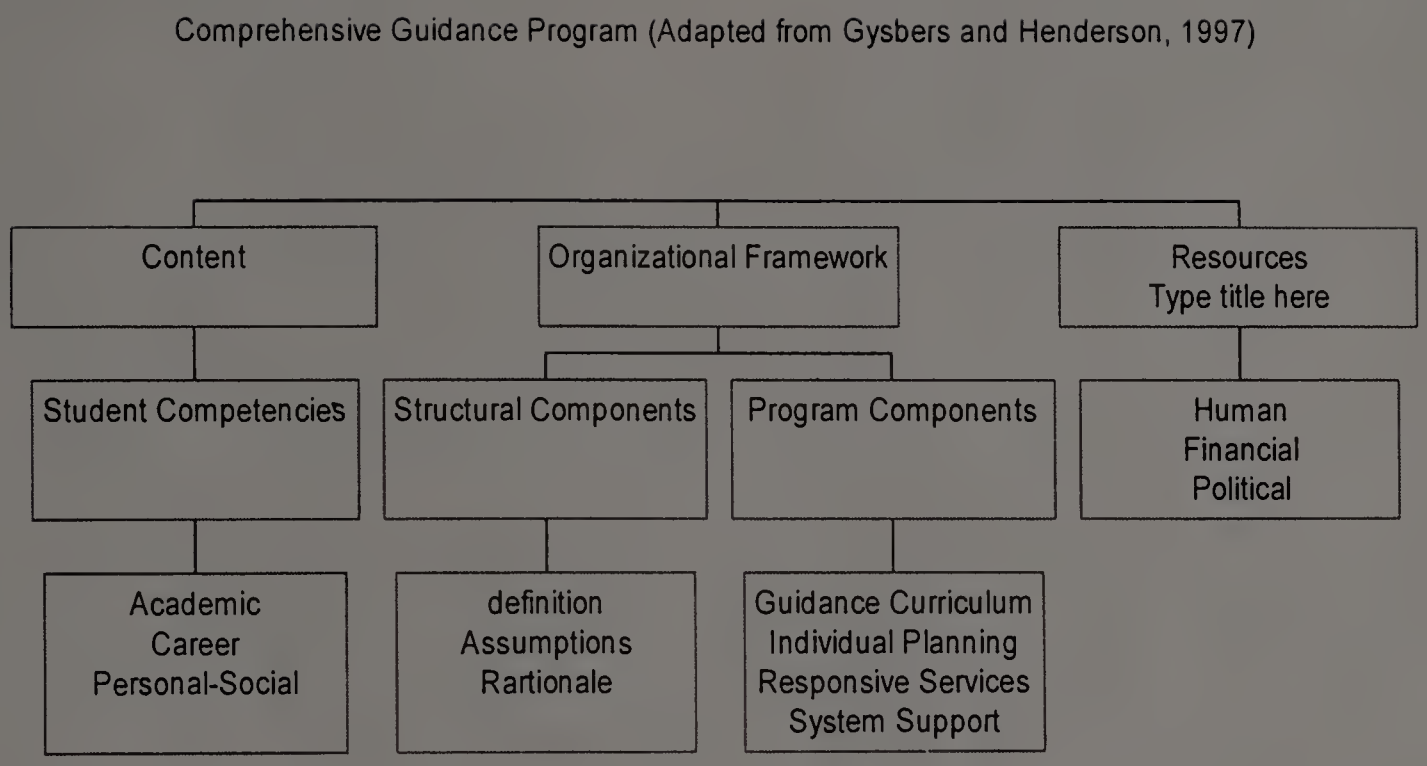


Figure 1. Comprehensive Guidance Program (Adapted from Gyshers & Henderson, 1997)

academic, career/vocational, and personal-social counseling. These domains create multiplex relationships with students because they allow for multiple forms of counselor support for students.

Multiplex relationships with students in a comprehensive program can consist of counselors giving academic support by helping students pick classes or arrange for SAT or MCAS prep classes. In the career/vocational domain, counselors can also help students decide which schools are the best match for a student's interests, help students fill out college applications, or help students with vocational placement after high school. Personal-social support in a multiplex relationship between counselor and student can be personal counseling in a time of stress or turmoil in a teenager's life.

Within the organizational framework of a comprehensive guidance program are program components. These components contain a delivery system for services that create an opportunity for counselors to relate to students through multiple strands or

roles. For example, preventative guidance curriculum concerning substance abuse can be delivered as classroom teacher or small group facilitator. Whereas, individual planning that helps students identify interests and aptitude offers a one-on-one opportunity to help students. In times of crisis, counselors can offer responsive services to the whole school in the auditorium, or to selected groups in classrooms or small groups. Responsive services can also be offered by the counselor as personal help, or as a linkage to resources outside the school. The repertoire from whole school instruction to individual counseling creates an opportunity for students to interact with counselors in different ways and times with students.

Counselors are in a unique position of being helpful to students because they are able to interact with them in a social web that consists of different forms of support (domains) and different ways of support (delivery services). Using social capital theory as an organizational framework for the social structure that is created by school counseling programs will enable research to identify aspects of the structure that create value for the students. For example, trusting relationships are a prerequisite for the creation of social capital; therefore, determining whether students trust their counselor would be important in understanding if the counselor can help those students or not. This may have implications for whether students stay with one counselor for their tenure, or if students are assigned to counselors by grade.

Counselors take different roles when helping students, such as classroom teacher or individual coach. Examining the different aspects of the social structure that is created by the different roles counselors take will enable research to determine which of

these aspects create the most value for students. For instance, is help with scheduling more effective in groups or one-on-one counseling?

Being able to determine levels of social capital created by school counseling programs will not only help in unpacking the different aspects of the program, but will also be helpful in determining which groups are gaining more or less access to the resources. Once a measurement for social capital is established, then it can be determined if boys or girls are more apt to respond to instruction when certain relationships exist, such as counselor as classroom teacher or individual coach. Also, differences among class or race can signal some systemic constraints (Stanton-Salazar, 2001). For example, if students from low socioeconomic families overall demonstrate lower levels of social capital because of clogged information channels, then that may indicate that there are some social or institutional constraints on the students.

As stated earlier, students need occasional opportunities to interact with supportive significant others for their healthy development (Stanton-Salazar, 2001). An intricate social web can be created for students and counselors to interact within the organizational framework of a comprehensive program. Examining the multiplex and multistranded nature of the counselor-student relationship may enable research to determine which combination of these aspects of the relationship offers the best opportunity for students to develop trusting, caring, and productive relationships with counselors. Measuring social capital will also allow for the analysis of differences between groups, which could have direct benefits for students by identifying constraints on the flow of resources to students.

Advantages of Social Capital

A very important advantage social capital theory offers students is the opportunity to ensure an equitable distribution of resources to all students. Croninger (1997) demonstrates that low-status students have the most to gain from social capital, and Stanton-Salazar (2001) demonstrates that multiplex and multistranded relationships offer the most benefit to students. Research has shown that social capital outside the home influences achievement and behavior. Hao and Bonstead-Burns (1998) demonstrate that social capital, in the form of high expectations of community members, raises academic achievement. Smith (1992) demonstrates that community social capital influences the drop out rate of students. Social capital theory applied to school counseling programs presents an opportunity to assess whether the national model's goal of ensuring that all students receive the support they need to succeed is being met.

Social capital development can produce system level behaviors and can aid in accounting for specific outcomes. For instance, multiplex and multistranded relationships between student and counselor, along with the vision of counselor as leader and advocate for students, can enhance the effectiveness of the counseling program because all students, in spite of institutional constraints, will have access to the schools' resources. When outcome variables, such as GPA, test scores, dropping out, college placement, and study skills are examined in relation to the social structure of students in school, lack of achievement in these variables can be viewed systemically.

Examining counselors and counseling programs through the social capital lens will enable researchers to determine if the social organization of the guidance program

has produced something of value, and what components of the social organization contribute to the value produced. Before the components of the social structure can be unpacked to determine if they create value, a benchmark for social capital must be established. I propose to evaluate an instrument that will measure the social capital created by student-counselor relationships. There are problems inherent in measuring social capital (Baron, 2000; Lin, 2001; Dika, 2002), such as validity and strained relations between proxy variables and theoretical constructs. But, by developing an instrument using Coleman's theory and staying within the context of school counseling, some of those issues will be addressed.

# CHAPTER 2

## REVIEW OF LITERATURE

There has been a tremendous proliferation of social capital literature in the past decade. Until 1990, there were only 14 articles that could be retrieved from an ERIC review. In January of 2005, there were 472 articles retrieved. The research ranges in scope through sociology, anthropology, economics, and education.

This section is limited to and reviews 23 empirical studies of social capital that are related to students and educational outcomes (see Figure 2). They are categorized by two research questions, but inevitably the categorization points out significant differences among theorists. The articles are also categorized by the type of social capital they represent, such as family, community, or school. The first research question is based on Bourdieu's premise that social capital is disproportionately possessed by the majority group. In this instance, social capital may contribute to people's disadvantages through oppression and social reproduction. The question asked is, "how does social capital compound the educational disadvantages many families must face?"

The second question is based on Coleman's implication that social capital can be democratically distributed and that it can compensate for a lack of other resources in the family, such as financial and human capital. The question asked here is, "how does social capital alleviate the educational disadvantages that families face?"

How does social capital compound the educational disadvantages that many families face?

Bourdieu, P., & Passeron,J. C. (1977). Reproduction in Education, Society, and Culture.

Bourdieu, P., & Passeron J.C. (1979). The Inheritors: French Students and Their Relation to Culture.

Bourdieu used a wide range of surveys and descriptive statistics as evidence that working class students were under represented in higher education. He states that schools act as a filter for social and cultural capital by ensuring success for some students and poor academic performance for others.

Lareau, A. (1987). Social class differences in family school relationships: the importance of cultural capital. Sociology of Education, 60(April), 73-85.

Lareau, A., & Horvat, E. M. (1999). Moments of Social Inclusion and Exclusion: Race, Class, and Cultural Capital in Family-School Relationshipss. Sociology of Education, 72, 37-53.

Lareau published two qualitative studies that examined the social barriers that prevent parents from becoming involved in schools. The shared values among the teachers and middle class parents created social and cultural capital not available to the working class parents

McNeal, R. B., Jr. (1999). - Parental Involvement as Social Capital. Social Forces, 78, 117-44.

In general, the study found that social capital had positive effects, especially on truancy and dropping out. However, once race, SES, and household structure were examined the data revealed that white middle class parents got more for their involvement than minority and lower class parents.

Lopez, E. S. (1996) Social capital and the educational performance of latino and non-latino youth. ISRI Research Report No. 11 (ED427934).

Lopez revealed that students who had low levels of social capital at home had low levels of capital at school and were most likely to be in non-college bound classes.

Wong, R. S.-K. (1998). Multidimensional influences of family environment in education: The Case of Socialist Czechoslovakia. Sociology of Education, 71(1), 1-22

Wong's analysis reveals that social and cultural capital play a role in the stratification process in Czechoslovakia. Political membership had become an active stratification factor.

- Lauglo, J. (2000). Social capital trumps class and cultural capital? engagement with school among immigrant youth. In T. Baron, Field, J., Schuller,T. (Ed.), Social Capital: Critical Perspectives . Oxford: Oxford University Press.

In this study, social capital was interpreted as an asset to students, and social class and cultural capital were considered disadvantages because these variables are purported to support social reproduction theory.

How does social capital alleviate the educational disadvantages that many families face?

Family

Coleman, J., Hoffer,T., Kilgore,S. (1982). High School Achievement: Public, Catholic, and Private Schools Compared York: Basic Books. New.

Coleman, J. S. (1988). Social capital in the creation of human capital. American Journal of Sociology, 94(Supplement), 95-120.

Coleman and Hoffer concluded that the social capital within the family and community contributed to higher academic achievement. They also concluded that the social capital of the community can make up for the lack of social capital in the home evinced by low dropout rates in catholic schools for children of single parents.

Furr, L. A. (1998). Fathers' Characteristics and Their Children's Scores on College Entrance Exam: A Comparison of Intact and Divorced Families. Adolescence, 33, 533-42.

Furr's results indicate that divorced non-custodial fathers have less influence on college entrance exams than fathers of intact families. Divorce also offsets any advantages a student may have had through the father's human and financial capital.

Carbonaro, W. J. (1998). A Little Help from My Friend's Parents: Intergenerational Closure and Educational Outcomes. Sociology of Education, 71(4), 295-313.

Carbonaro concludes that social capital as measured by intergenerational closure has positive effects for behavior outcomes but minimal effects for academic outcomes.

Valenzuela, A., Dornbusch, M. (1994). Familism and social capital in the academic achievement of mexican origin and anglo adolescents. Social Science Quarterly, 75(1).

The authors conclude that the interaction between the family members and the parents' human capital support Coleman's assertion that a family's resources, like financial and human capital, need to be activated by social relations.

Figure 2. Social Capital – Review of 23 Studies

Continued, next page.

Figure 2, cont'd.:

Teachman, J. D. (1996). Social capital and dropping out of school early. Journal of Marriage & the Family, 58(3), 773-83.

Teachman, J. D. (1997). Social capital and the generation of human capital. Social Forces, 75(4), 1343-59.

The author found that attending Catholic schools and family structure have strong effects on dropping out of school, and that more extended and specific measures of social capital, such as parent-child and parent-school connectivity, are related to staying in school.

Family and Community

Furstenberg, F. F., Jr., & Hughes, M. E. (1995). Social capital and successful development among at-risk youth. Journal of Marriage & the Family, 57(3), 580-92.

The authors conclude that social capital had strong and consistent effects on educational attainment and socioeconomic success. Most of the within family and community capital variables showed significant and robust relationships to graduating from high school and attending college.

Smith, M. H. (1992). Effects of human capital and social capital on dropping out of high school in the south. Journal of Research in Rural Education, 8(1), 75-87.

Smith found that family and community social capital does influence dropout rates, and that community capital can make up for the lack of social capital within the family.

Hao, L., & Bonstead-Bruns, M. (1998). Parent-child differences in educational expectations and the academic achievement of immigrant and native students. Sociology of Education, 71(3), 175-98.

The authors conclude that community social capital affects academic achievement above and beyond family social capital. In this instance, community social capital alleviates some of the disadvantages of low family capital.

Israel, G. D., Beaulieu, L. J., & Hartless, G. (2001). The influence of family and community social capital on educational achievement. Rural Sociology, 66(1), 43-68.

The results were mixed but overall supported the premise that family and community capital contribute to academic achievement. Both structural and process forms of family capital influence academic achievement.

Family and Schools as Community Capital

Parcel, T., & Dufur, M. (2001). Capital at home and at school: effects on student achievement. Social Forces, 79(3), 881-911.

In General, high levels of family and school capital positively affected reading and math scores.

Croninger, R. G. (1997). Does Social Capital Influence Adolescents Academic Development. , University of Michigan.

Croninger concluded that schools can be places that promote positive development of young people through the creation social capital. Social capital, in the form of student-teacher relations, can enhance academic achievement and behaviors, particularly for the students who do not have social resources elsewhere.

Stanton-Salazar, R. D., & Dornbusch, S. M. (1995). Social capital and the reproduction of inequality: Information networks among mexican-origin high school students. Sociology of Education, 68(2), 116-35.

Stanton-Salazar, R. (2001b). Manufacturing Hope and Despair. New York: Teachers College Press.

According to Stanton-Salazar, urban youth are alienated because social constraints deny them access to the institutional resources that are necessary for their development. He states that there are difficulties for all students in seeking help, but that the low status students who do not seek help have the prospect of stunted development, marginality, and depressed life chances.

## Social Capital: Theoretical Review

### Pierre Bourdieu

Bourdieu defines social capital as "social obligations ("connections") which are convertible, in certain conditions, into economic capital and may be institutionalized in the form of title or nobility" (Bourdieu,1986, p. 243). He further defines social capital as the

> . . . aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationshipss of mutual acquaintance and recognition- or in other words, to membership in a group - which provides each of its members with the backing of the collectively- owned capital. (Bourdieu, 1986, p. 248)

These relationshipss are maintained by material or symbolic exchanges, and they may be formalized by the use of a name, a school, a political party, etc. The exchanges may take place in a geographical area, or an economic or social space. The amount of social capital individuals can possess depends on the size of the network they can mobilize, and by the amount of economic and cultural capital possessed by the members of the mobilized group. The amount of capital an individual possesses is multiplied by the membership in the group. For example, a parent who is on the PTA may have more influence in the school than a parent who is not because of the membership in the group. According to Bourdieu, the network exists to create the collective resources of the group. This can be predominately a conscious endeavor, as in the case of a select group that forms to concentrate social capital in order to benefit from the collective resources established by the group. Or it can be predominately unconscious, as in the case of a family naturally sticking together. However, in either example there is both a conscious and an unconscious effort to consolidate resources.

"The network of relationships is the product of investment strategies, individual or collective, consciously or unconsciously aimed at establishing or reproducing social relationships that are directly usable in the short or long term" (Bourdieu,1986, p. 249).

Consecration is the term used to describe the process that reifies the norms and expectations that are created by the exchange of capital within a group and that produce durable obligations. For example, exchanging a cup of sugar between neighbors can create feelings of gratitude and respect, and can produce a sense of obligation. Receiving a law degree from a prestigious institution can create a sense of obligation or loyalty to the institution. In either case, the obligations are symbolically exchanged and reified by the process of consecration.

Social capital reproduction requires a continuous series of exchanges that acknowledges the symbolism or recognition of the group over and over. The benefits of accumulating and maintaining social capital increase in proportion to the size of the capital within the group, but this requires an expenditure of time and energy. In order to consolidate the resources of the group, an individual or a small group of individuals is mandated to represent the group; examples are the head of a family or a president of a club. The purpose of the group is to preserve the accumulation of capital, and therefore group membership and leadership rights are regulated.

In summary, Bourdieu distinguishes between three broad categories of capital, namely economic, cultural, and social. He further distinguishes cultural capital into embodied, objectified, and institutionalized capital. Bourdieu's cultural capital theory is the most developed of these three categories. Bourdieu maintains that social capital is not reducible to economic or cultural capital, but acts as a multiplier to increase or

maintain the economic and cultural capital of a group. Foremost, Bourdieu's work attempts to explain the social reproduction of inequality. He states that social capital is the process by which individuals in the dominant class reproduce the privileged group that holds these various forms of capital.

James Coleman

James Coleman (1988) explains that social capital is not completely tangible, that it exists in the relationships among people, and that it can facilitate productive activity. Social capital identifies certain aspects of these relationships by their functions and creates value or resources to the people in the network. This enables them to achieve their interests.

Coleman (1988) states that social capital plays an integral role in the formation of human capital. Human capital is generally perceived as education and training and, more specifically, as the skills and abilities people acquire that enable them to act in new ways. For example, a student's access to a school counselor who possesses institutional resources can be a form of social capital. Social capital plays a role in the creation of human capital because a school counselor who teaches a student career development skills can play an integral role in the creation of new skills and capabilities for the student.

Coleman states that

> social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of social structure, and they facilitate certain actions of individuals who are within the structure. Like other forms of capital, social capital is productive, making possible the achievement of certain ends that would not be attainable in its absence. Like physical and

> human capital, social capital is not completely fungible, but is fungible with respect to specific activities. (Coleman, 1988, p.302)

Coleman states that there are several kinds of social capital, but in all forms the capital is lodged in the structure of the relationships, not in the actors themselves. For instance, capital can be trust between two people, or it can be in a sense of obligation in a group. Social capital creates value to people because it allows advantages not otherwise present, as described below. Without the capital they would not be able to achieve their interests. Social capital can exist among large organizations, or small groups of people like a family.

Forms of Social Capital. Social capital identifies certain aspects of the social structure by their functions. For example, Coleman identifies three forms of social capital: obligations, expectations, and trustworthiness of structure; information channels; norms and effective sanctions. These characteristics of the social network are capital and they have value to the actors as resources to achieve their interests.

Obligations, expectations, and trustworthiness of structures produce social capital because they can create value for those within the structure. In a trustworthy environment, someone can do something for someone else with the expectation that there will be a reciprocal action in the future. Another form of social capital is information channels. The value is not in the obligations and expectations incurred by the passing of information, but in the information itself. Norms and effective sanctions are not covered in this study.

Social Structures that Produce Capital. Coleman identifies two social structures that facilitate social capital; one is closure of social networks, and another is

appropriable social organization. Closure of a social system can create the norms and sanctions necessary for the creation of social capital. If a system is open there are no ways to effectively sanction negative behavior. Coleman identifies intergenerational closure as a characteristic of social structures that produce capital. Intergenerational closure is when a child's parents know the parents of the child's friends. When this situation exits, parenting is distributed among adults and channels of communication develop. In this example of closure, a set of sanctions and norms can be developed that guide and monitor behavior, thus creating capital for the family. Appropriable structures are outside the realm of this study.

Within-Family and Outside the Family Social Capital. Coleman further differentiates social capital into within-family capital and outside the family (community) capital. Family background can be separated into three categories, financial capital, human capital, and social capital, and all three can play a role in the child's development. Social capital outside the family consists of the social relationshipss among the parents, the amount of closure the relationshipss exhibit, and the parent's relationshipss to the community institutions.

## How Does Social Capital Compound the Educational Disadvantages that Many Families Face?

Bourdieu describes social capital as the aggregate of actual or potential resources that can include other types of capital such as economic and cultural (Bourdieu, 1986) Foremost, Bourdieu's work attempts to explain the social reproduction of inequality. He states that social capital is the process by which

individuals in the dominant class reproduce the priveledged group that holds these various forms of capital.

Pierre Bourdieu's research led the way in determining that social capital was disproportionately distributed to the majority group and that it compounded the disadvantages of the minority group. Lareau's and McNeal's studies on family capital, in the form of parental involvement, added evidence to the fact that race and class can be associated with disadvantages in the educational system. Wong and Lopez studied both family and community social capital and their affect on educational outcomes. Wong concluded that the social capital of the majority group contributed to advantages in education, and Lopez determined that the lack of social capital in the minority group compounded the disadvantages of the minority group. Luaglo's (2000) research is a good transition into the next section because he posed the question directly: Does social capital help or hinder students' achievement? He studied immigrant students in Norway and his results indicate that social capital helps students and this leads us to the research that supports this conclusion.

## How Does Social Capital Alleviate the Educational Disadvantages that Many Families Face?

### Family

The studies in this section are organized in terms of the kind of capital that they address. The first two by Coleman and Hoffer, however, stand alone because this is the research that pioneered the optimistic interpretation of social capital. The next five studies after Coleman include and expand upon his notion of family capital. Following

these, four studies are introduced that include family capital but also try to further define the concept of community capital. The final four studies narrow the definition of community capital to the schools, with the last three dealing specifically with teachers, and to a limited degree with counselors, as sources of social capital for students.

The next body of research demonstrates that family social capital is an advantage in education for families. Furr (1998) found that intact families had positive effects on college entrance exams. Carbonaro (1998) demonstrates that inter-generational closure positively affects math scores and dropping out. And familism in Mexican families (Valenzuela & Dornbusch, 1994) has a positive affect on grades.

Two studies by Teachman et al. (1995; 1996) demonstrate that family social capital, defined as two-parent households, plays a significant role in dropping out of school. Valenzuela and Teachman also examined interaction affects and determined that social capital is necessary for the transmission of other familial resources, like financial and human capital. This supports Coleman's assertion that human and financial capital, by themselves, are not enough to affect achievement.

Family and Community

The next four reports include family capital, and they introduce the concept of community capital as a source of support for families in their educational pursuits. They used most of the common family social capital variables outlined by Coleman, but they measured community social capital in various ways, and with varied results showed how community capital affects academic achievement. Furstenburg and Hughes (1995) demonstrate that community capital in the form of good schools and help

networks had more of an effect on achievement issues than on behavioral issues. Their results indicate that the higher the community social capital the more likely students are to graduate from high school and attend college.

Smith et al. (1992) compared characteristics of various communities and determined that community capital is related to dropping out, and that community capital can compensate for low family capital. Hao and Bonstead-Burns (1998) shed some light on how immigrant communities affect family capital and their findings show that community expectations affect achievement and can compensate for low family capital. Israel et al. (2001) delineated community social capital into two forms, process and structural, and found that family capital is more influential on achievement than process forms of community capital which are more influential than structural forms of community capital.

Family and Schools as Community Capital

The next four articles will be outlined in more detail because they deal specifically with schools as sources of social capital for families and students. The first article by Parcel and Dufur defines school capital to reflect family capital in terms of financial, human, and social resources. The second article by Croninger and the last two by Stanton-Salazar begin to deal specifically with teachers and counselors and their relationships with students, but the role of counselor seems to be subsumed by that of teacher because the researchers do not make any distinctions between the two in their analysis.

The first study in this section demonstrates how both family and school social capital can be advantageous in educational attainment. Parcel and Dufur (2001) evaluate the effects of several forms of capital on academic outcomes. They use Coleman's variables of family capital, which include human, financial, and social, and create a parallel form of school capital. The authors investigate whether these forms of capital have any effects on math and reading scores.

The data were derived from the National Longitudinal Survey of Youth, which was established in 1979, and interviewed 12,686 youths between the ages of 14 and 21 annually. In 1986, the children of female respondents were evaluated bi-annually and, in 1996, the schools the children attended were also surveyed. Ordinary least squares regression was used to test the effects of the independent variables on reading and math scores.

In general, high levels of family and school capital positively affected reading and math scores, but the results are mixed. For instance, the higher the human capital of the school, the lower the math scores, and girls received some of the benefits of family capital, while boys did not. Parcel and Dufur also examined interaction effects and determined that math scores were increased when mothers had high human capital and the teachers were caring. The interaction effects also revealed that educated mothers were able to compensate for the negative effects of attending a school with social problems.

The authors conclude that both family and school capital influence achievement, but they cannot support the claim that social capital is an essential ingredient in

transmitting human capital into achievement. Their analysis points more to interaction between family human capital and school social capital.

The next three reports focus specifically on educators and how their relationshipss with students can compensate for disadvantages the students may have. For example, Croninger (1997) examines the role that teachers and counselors play in the creation of social capital. The purpose of his research is to determine if access to school-based forms of social capital influence academic achievement. Croninger focuses on relationshipss and interactions between students and educators to determine if social capital in the school can compensate for a lack of social capital at home for students at risk.

The sample used in this study consisted of 10,979 students who participated in NELS. Principal component factor analysis was used to create the social capital variable, which included student-teacher relationshipss and student-teacher talks. Academic status before high school, social and academic risk, and academic outcomes were also used as variables. A combination of t-tests, Pearson correlation coefficients, and ordinary least squares analysis was used to examine the data.

Like other studies, Croninger's results were mixed. Generally, he found few differences between students and their access to social capital. One difference, however, is that previous success in school was related to more access to the school's social capital through the teachers. The results also indicate that access to schools' social capital promotes more positive academic behaviors, reduces the likelihood of dropping out of school, and promotes greater achievement gains in math scores. Also, students who were considered at risk academically showed the greatest gains when they had

access to the teachers. But, students who did not see their teachers as helpful were more likely to drop out of school, come to class unprepared, skip class, and spend less time on homework.

Croninger concluded that schools can be places that promote positive development of young people through the creation of social capital. Social capital, in the form of student-teacher relationships, can enhance academic achievement and behaviors, particularly for the students who do not have social resources elsewhere.

Stanton-Salazar's research could have easily fit into the social capital as a disadvantage category. Theoretically, he utilizes both the optimistic and pessimistic interpretations of social capital, but his findings support social capital as a way to support the disadvantaged. But, he does outline institutional constraints on students and families.

Stanton-Salazar (1995) proposes that grades, student expectations, and language proficiency are indicators of a student's consciousness and that these variables heighten chances for the development of supportive ties to institutional agents. He surveyed 205 Mexican-origin high school students in the San Diego area to determine if these variables serve to increase their social capital by enabling the student to solicit help from teachers and counselors, and by motivating these institutional agents to be genuinely supportive.

A combination of t-tests and ordinary least squares regression was used to analyze the data. The results did not support social reproduction theory. There were no significant differences in student-teacher relationshipss, such as receiving academic support, between SES categories. Higher grades were not a predictor of increased levels

of social capital, but grade level was. Sophomores have less access to sources of social capital than juniors who have less access than seniors. Stanton-Salazar concluded that he needed more information on student networks and a better research design.

Stanton-Salazar (2001) refined his examination of teachers and counselors as institutional agents of support for students. The purpose of this study was to outline the constraints and social forces that prevent many low-status youth from gaining access to the institutional support they need, like academic advice, crisis intervention, career information, and emotional support. Also, the purpose of the study was to identify the variables that allow the disadvantaged students to get the support they need.

The data for this study come from Stanton-Salazar's 1995 survey, plus an additional 1,500 students were surveyed and 51 students were interviewed along with some of their family members. The results show three constraints for low-status youth to establishing trusting relationshipss with school agents. First, a psychological constraint in the form of a defensive network orientation emerged; this orientation is a result of repeated failed attempts by students to interact in meaningful ways with educators. Bureaucratic structure was the second constraint and this consisted of meritocratic and individualistic ideologies; these ideologies create passive structures where students who do well get access to valuable resources like college information, as compared to active structures that reach out to students who may not be doing well in school. The third constraint was the organizational structure; students found it problematic to get help when there was a 350-to-1 student-to-counselor ratio, and when teachers had to teach five classes a semester with 25-30 students per class.

Other results indicate that most of the minority youth in the study reported school personnel as potential sources of support, as compared to the white, middle-class students, who reported familial resources of support. However, up to one half of the minority students reported not seeking any help from these potential sources. But, the results also indicate that trusting and caring relationships between teachers and students were necessary for the effective transfer of institutional support to the students.

According to Stanton-Salazar, urban youth are alienated because social constraints deny them access to the institutional resources that are necessary for their development. He states that there are difficulties for all students in seeking help, but that the low-status students who do not seek help have the prospect of stunted development, marginality, and depressed life chances. He also states that those who do get help from institutional agents may not feel the full weight of social oppression. Low-status students can benefit greatly through multiplex, defined as multiple forms of support like academic and emotional, and multistranded relationshipss, defined as multiple roles like coach and teacher.

## Integration of Research

Reviewing the articles by research question and by type of social capital was helpful in understanding how social capital affects educational outcomes. A brief review of other possible ways to categorize the empirical studies may further our understanding of how social capital theory is applied to research. For instance, a review of the chronology of the publications, the population studied, the methods used for

analysis, and the results of the studies reveals information not directly addressed previously.

A chronological review reveals a building effect at work on social capital research. The articles published in the early 1990s define social capital similarly to Coleman with slight variations or additions. The articles in the late 1990s, and the most recent articles, clearly define social capital in order to delineate more specific attributes that are related to academic achievement. For instance, Parcel and Dufur (2001) exemplify the evolution of community capital by defining it as school financial, human, and social capital. Also, Israel et al. (2001) have identified process and structural variables for family and community capital. The articles in the mid-1990s directly build upon each other. Teachman et al. (1997) built on his previous research (1996), which addressed some of the limitations of Furstenburgh and Hughes (1995). A chronological review reveals an increased sophistication in operationalizing social capital over the last decade.

Examining the research by the population studied reveals a stark contrast. Of the 23 articles, only two focus specifically upon elementary students (Lareau, 1987;1999). A project by Furstenburgh and Hughes (1995) involves elementary students, but they are studied longitudinally and the outcomes evaluated are from the trajectory to adolescence. The other 20 studies deal with high school students. This may be due to a paucity of data available to study the younger cohort as there is for adolescents; eleven of the reports use national data sets.

There is also a methodological contrast. The two articles by Lareau (1987;1999) use qualitative analysis, and one by Stanton-Salazar (2001) uses a combination of

qualitative and quantitative methods. The other 20 articles use large data sets analyzed by a combination of factor and regression analyses. Three of these articles use interaction terms to analyze characteristics of family and school relationshipss. Again, data availability may be the leading factor for methodological choices, and the methods used may be skewed by the types of articles published in educational and sociological journals.

Finally, a review by results shows that social capital has positive and negative effects, depending on the theoretical perspective, on both behavior and achievement variables. The social capital of the majority group negatively affects parental relationshipss with the school and it negatively affects educational attainment. Social capital can have positive effects on students, especially those who may be low on financial or parental human capital. Half the articles report positive effects of social capital on variables such as dropping out of school or doing homework. The remaining half of the articles report positive gains in areas like GPA, or reading and math scores. The evidence seems conclusive that social capital, no matter what perspective one takes, affects people's lives.

A review of social capital research reveals three trends: a building effect on social capital research; social capital has an effect on behavior and achievement; and methodological conformity. What is surprisingly revealing is that educators were only studied as sources of capital for students in three studies, and in those studies school counselors were subsumed by the role of teacher. This is surprising because school counselors are in a unique position to be sources of social capital for students. The next

section examines school counselors and school counseling programs as sources of social capital.

## Implications for School Counselors

The research findings on social capital have several implications for school counselors, particularly counselors in a comprehensive program. Counselors should learn to apply social capital theory in order to use multiplex and multistranded relationshipss to support and build social capital for all students in the school. Another implication is school counselors can support and build social capital in the home through consultation, coordination, and referral services. Counselors can also build community social capital through professional development, multicultural training, and by addressing absenteeism, school violence, and other risky behaviors of students.

School counselors are in a position to compensate for the lack of social capital in the home. There is currently a new vision emerging in school counseling that calls for the human, political, and financial resources of the program to promote counselors as school leaders and advocates for students who may not otherwise have anyone advocating for them.

The combination of a comprehensive guidance program and the new vision of school counselors presents an opportunity to incorporate social capital theory into school counseling and create optimal access to school resources for all students. The utility of social capital theory can range from it being a central organizer to it being just another tool for evaluation. Given the isolation of youths in today's society (Taffell, 19xx) it is surprising that even now researchers have ignored school counselors as a

source of social capital for the students in public schools. In order to analyze the effectiveness of counselors as sources of social capital, researchers must define social capital in the context of school counseling.

## Limitations of Existing Research

### Lack of Clear Definition

Currently there are no instruments that attempt to measure students' social capital directly. In the aforementioned studies, social capital was operationalized many different ways. The definitions of social capital ranged from narrow family variables like divorced fathers (Furr, 1998), to broad community variables that included analyses of school bonds and tax increases (Smith, 1992). However, most of these variables are indirect measures, or proxy measures of social capital. The researchers who produced these reports used large data sets that were not designed specifically to measure social capital.

The researchers used items from the data that they believed best represented the types of social capital they wanted to measure. For instance, Croninger (1997) created a student-teacher relationships variable using factor analysis. The items for this variable consisted of questions like, "do you value students," and "are you interested in students?" These questions can be helpful, but they do not address the perceptions of the student. Other studies used proxy variables such as nationality (Lauglo, 2000) which purports to measure extended, cohesive families, and political membership (Wong, 1998), which purports to measure resources outside the family. Although most of the

measures used for these studies were not direct measures of social capital, they were attempts to measure social relationships that generate productive activity.

Students as Agents

As mentioned above, it is important to examine the student-counselor relationship and social capital because there are no studies that do so. It is also important to examine the student-counselor relationship because students are active participants in the creation of capital for themselves. A school can be described as a somewhat closed or dense network. Students interact with teachers, staff, and counselors on a daily basis. The opportunity to develop trust and expectations between students and adults is more likely than between school personnel and students parents.

The only studies to adequately address the issue of student as agent are by Stanton-Salazar (1997, 2001). In his research, he surveyed over 1700 students and interviewed 51 more. He was able to identify help-seeking behaviors among students and he states that minority students view teachers as sources of support.

Exchange of Resources

Because previous studies have been poorly conceptualized using indirect variables from large data sets, determining directionality or exchange of resources is problematic. Of the four articles that deal with schools or school personnel as sources of social capital, Stanton-Salazar is the only author to adequately address the issue of exchange of resources. The most salient aspect of his research is that he identified institutional constraints on the exchange of school resources between teachers and

students. First he states that trust is necessary for the effective transfer of institutional support. He also states that there are social constraints to developing trusting and caring relationships. For example, a student who may seek help and be rebuffed is at risk of developing a defensive network orientation that will limit access to the school's resources.

## Summary

This chapter reviewed the pioneers of social capital theory, Pierre Bourdieu and James Coleman. Bourdieu pioneered the view that social capital was a disadvantage to the non-dominant group and six articles were found to support his claim. James Coleman pioneered the view that social capital can be an advantage for a student or family to help gain access to needed resources.

Coleman's theory was predominant throughout the extant research. There were 18 articles that drew on his theory to study the effects of social capital on student achievement. Besides Coleman's original two, there were five more articles that focused exclusively on family social capital. Four others focused on family and community social capital, and there were four that concentrated on family and schools as community social capital.

In general the research demonstrates that social capital can have positive effects for students and families. The implications for school counselors is that they are in a unique position to create social capital for students. Because of their multiplex and multistranded relationships with the students, they can tear down the barriers that

prohibit access to school resources and they can build bridges for all students to gain access to resources that will help them achieve high results.

There are limitations to the existing research. First, social capital has been operationalized vaguely and proxy variables such as political membership were used to Measure social capital. Also, students were not thought of as agents in the creation of capital. Longitudinal studies were used as data sets and out of all the studies there were three that actually used items directly related to students and school personnel. Finally, because of the use of these large data sets, determining directionality or the exchange of resources is problematic. Of all the studies, Stanton-Salazar (1995,2001) was the only one to address the issue.

Despite the proliferation of research on social capital theory over the last decade, there have been no studies that deal specifically with school counselors and social capital. The School Counselor Social Capital Instrument focuses exclusively on counselors and attempts to address the limitations of existing research.

# CHAPTER 3

# METHODS

## Overview

The purpose of this paper is to determine the reliability and validity of the School Counselor Social Capital Instrument (SCSCI). Once reliability and validity is demonstrated, then the instrument can be used to measure the social capital in the student-counselor relationship. A preliminary administration of the instrument was given to 156 high school students. Reliability was established in four constructs with Cronbach's alpha coefficients ranging from .91 to .84. The Closure construct measured .63. Other intra-test correlations determined that the scales were discriminable.

This study consists of the development of a theory-based objective instrument, and the determination of the psychometric properties of this instrument. The SCSCI purports to measure social capital created by the student-counselor relationship and is a high school student survey consisting of 58 Likert-type questions and 9 demographic questions. Possible responses will range between 1 and 5, where 1 equals Strongly Disagree and 5 equals Strongly Agree. Social capital is operationalized using 5 constructs derived from Coleman's theory: Trust, Student Expectations, Counselor Expectations, Information Channels, and Closure of structure. Respective examples of items in these constructs are: "my counselor is honest," "I expect my counselor to be concerned about my success after high school," "my counselor expects me to reach high when setting future goals," "my counselor knows what classes I need to achieve my future plans," and "my counselor knows my parents."

The primary advantage to using students self-reports is that their perceptions of these constructs can be assessed. A determination of whether students trust their counselor is critical to assessing whether value can be created by that relationship. A trusting environment is a prerequisite for any social capital creation (Coleman, 1988; Fukuyama, 1999; Putnam, 2000). Also, in terms of Information Channels, the survey can assess whether the students actually receive information that should be available to them. Information is a valuable resource and counselors hold the key to unlocking much of the resources students need to achieve success. For example, if students do not receive the appropriate information for class selection then they may not be able to achieve future goals such as attending college.

The disadvantage to student self-reports is that resources may actually be available to students but, because of student variables, the resources do not get utilized. For example, a student may choose not to access information made available to him/her. There may be many college information sessions available to students, but they choose not to participate, or students may not seek available help for personal problems. In either case, it is the responsibility of the counselor to find out why. In either case, the student may demonstrate low levels of social capital and the counselors would need to figure out why.

After slight modifications to the SCSCI, I administered the instrument to 412 more students. The previous correlation analyses was done along with tests to demonstrate the validity of the instrument. The results confirmed the findings of the first administration of the survey.

## Theoretical Framework for Instrument

Coleman (1998) identifies three forms of social capital: obligations, expectations, and trustworthiness of structure; information channels; and norms and effective sanctions. These characteristics of a social network are capital and they have value to the actors as resources to achieve their interests.

Obligations, expectations, and trustworthiness of structures produce social capital because they can create value for those within the structure. Coleman states that if A does something for B and trusts B to reciprocate in the future, then this establishes an expectation in A and an obligation in B. In a trustworthy environment, someone can do something for someone else with the expectation that there will be a reciprocal action in the future. For instance, obligations are established by a person receiving the favor, and expectations are established by the person giving the favor. In a dense network, social capital can be accumulated as more and more of these exchanges take place.

Trust, Student Expectations, and Counselor Expectations were chosen as constructs because of their pivotal role in creating social capital. Trust is the primary ingredient from which expectations can be produced. These constructs are not that difficult to operationalize and can be assessed with a paper-and-pencil test. Determining if there are high levels of trust in the social structure of the student-counselor relationship and high expectations within the network is an important step in determining if there is social capital created in the network.

Another form of social capital is Information Channels. The value is not in the obligations and expectations incurred by the passing of information, but in the

information itself. Information is important because it provides a basis for action. Knowing what colleges match the student's interests and price range is critical when choosing colleges to attend.

School counselors are in a unique position to facilitate the exchange of information from school to student. This is especially true for schools that have implemented a comprehensive guidance program because of the focus on academic, career, and social domains. Counselors in these programs have designed curriculum that is supposed to make important information about these domains available to all students.

Coleman identifies two social structures that facilitate social capital; one is Closure of social networks, and another is appropriable social organization, which is not addressed in this study. Closure of social systems can create the norms and sanctions necessary for the creation of social capital. If a system is open, there are no ways to effectively sanction negative behavior. Coleman identifies intergenerational closure as a characteristic of social structures that produce capital. He defines intergenerational closure as when a child's parents know the parents of the child's friends. When this situation exits, parenting is distributed among adults and channels of communication develop. In this study the closed structure is between the student, the counselor, the teachers and the student's guardian(s).

Norms and effective sanctions and appropriable social organization were not operationalized for this study because of the length of the instrument and the difficulty in measuring these concepts.

## Construct Development

Trust was chosen as a construct because it is generally agreed that trust is a prerequisite for the generation of social capital. Trust was also chosen because it could be directly measured in a questionnaire. The definition of Trust for this study was adapted from Webster's New World Dictionary to reflect the trust between counselor and student. It is defined as "a firm reliance on the integrity, ability, or character of the school counselor."

The Student Expectations construct was developed to replace the counselor obligations construct, which could not be unanimously sorted from the Trust construct. Initially counselor obligations was thought to be a good measure of social capital. This construct could not be independently sorted and students' perception of counselor obligations was too vague. Therefore, the Student Expectations construct was created because it correlates with Counselor Expectations as illustrated in Coleman's example. As noted above, the actions of A creates an expectation in A and an obligation in B. Also, student's expectations of their counselors is a more direct measurement than student's perceptions of their counselor's obligations towards the students.

Student Expectations is defined as expectations that students have of their counselors based on their perceptions of their counselors' duty; described as social, moral, or legal obligations. This definition was derived from Webster's definitions of expectations and obligations.

Research indicates that students can do better in school if they are expected to succeed (Rosenthal, 1991; Sherman, 2002). Because counselors affect three domains of students' development, it is critical that they have high expectations for all students.

Parental expectations was used as a variable of social capital in ten studies (Carbonaro, 1998; Coleman, 1982, 1987; Furr, 1998; Furstenberg & Hughes, 1995; Hao & Bonstead-Bruns, 1998; Lopez, 1996 ; Smith, 1992; Teachman, 1996, 1997), all of which generally indicate that this form of family social capital positively affects outcomes. There is an obvious need to include Counselor Expectations as a form of outside-the-family social capital. Counselor Expectations is defined as Counselors suppose or presume students will act in a certain manner, and was derived primarily from Webster's definition of expectation.

Counselors are able to interact with students in multistranded and multiplex relationships which offers a tremendous opportunity for students to receive valuable information from the counselors. Whether whole-school sessions for crisis management, classroom sessions on career planning, or individual counseling or referral, counselors hold the key to many institutional resources. Therefore, it is important to determine if the student is actually receiving these resources. If counselors do indeed transfer this information, then they are sources of social capital. The Information Channels scale was designed to address these issues and is defined as School counselor is a source and a conduit by which helpful information flows to student.

Coleman and Hoffer (1982, 1987) maintain that intergenerational Closure affects student outcomes. Teachman et al. (1997, 1996) indicate that Closure, defined as staying in one school, positively affects dropout rates. A variable to determine if students and counselors interact in a relatively closed network should be helpful in determining what relationship Closure has with social capital. This study defines

Closure as Counselor knows or is acquainted with significant other person in student's life. If counselors know the student's parents and teachers they may be able to pass on more information and be able to have common expectations for the student.

## Instrument Development

### Item Development

The preliminary version of the scale has 68 questions. Nine of these are demographics such as race, gender, grade, and aspirations. The remaining 59 are Likert-type questions. Possible responses range between 1 and 5 where 1 equals Strongly Disagree and 5 equals Strongly Agree. Editorial considerations were made when selecting items such as length of question, no loading or bias questions, no unstated assumptions, and selectively placed negatively worded items (see Appendix A for list of items per scale).

The Trust scale consists of 12 items. These items were derived from previous trust instruments and adapted for use with school counselors, and a listserv query to graduate school counselor students. Also, items were developed by logical interpolation.

Items for the Student Expectations scale were derived mainly from a listserv query of school counselor graduate students and logical interpolation. A comprehensive developmental guidance program is supposed to reach across three domains, be accessible to all, and advocate for students. Therefore, items reflecting these characteristics were developed for this scale. These included questions like "I expect

my counselor to help with personal problems as well as academic," and "I expect my counselor to reach out to me in order to help." There are 15 items in this scale.

Nine items were generated for the Counselor Expectations scale. These were derived from the listserv query and logical interpolation. These are not the counselor's expectations but the student's perception of the counselor's expectations. Given the social capital framework in a comprehensive developmental guidance program, school counselors should have high expectations for all students. Questions that reflected high expectations were used for this scale, such as "Counselors expect me to take responsibility for my choices" and "Counselors expect me to do all my schoolwork."

The Information Channels scale has 16 items. These were derived from a list of resources produced by the listserv query and logical interpolation of what resources should be available to all students in a comprehensive program. The list of resources covered the academic, social, and career/vocational domains. For example, questions like "My counselor can help me find an internship" and "My counselor knows what colleges are a good match for me" were included in this scale.

The Closure of Social Structure scale consists of only 4 items. There are only 4 items because the scale is meant to reflect the theory that is a tight network between adults and students. Essentially, the scale asks whether the adults know each other and the students. Because the instrument is supposed to measure the social capital in the student-counselor relationship, the questions were centered on adults that both student and counselor would know in the school system. These are the items included in this scale: "My counselor involves my parent(s) or guardian(s) in my school experience,"

"My counselor knows my parent(s) or guardian(s)," "My counselor knows my teachers," and "My parent(s) or guardian(s) feel comfortable calling my counselor."

The preliminary instrument consists of an introduction and consent paragraph, 9 demographic questions, and 59 scale questions. The demographic questions include variables that are considered pertinent for disaggregating the information such as school, grade, race, gender, and social status. Also considered in these questions were variables that may be considered outcome variables. These include items such as number of honors classes, post high school aspirations, GPA, and number of times met with counselor (see Appendix B for preliminary instrument). Also interspersed in the survey were questions that related to delivery of services. Information about mode of delivery may be helpful in determining what creates more opportunity for capital to be developed. For instance, questions were asked about whole school session, group work, and one-on-one counseling.

Construct Validity

Construct validity was built by a Question Sort (Q Sort) by experts. The construct definitions and items were written on 3x5 cards. The experts included two school counselor educators and three third-year school counselor graduate students. The panel was given the cards with definitions on them and asked to sort the cards with the items on them according to definitions.

The Q Sort resulted in the elimination of a small number of items, some minor editing of some of the remaining items, and the elimination of a construct. The first sort revealed that the initial obligations construct was too closely sorted with the Trust scale.

The Counselor Expectations construct was developed and then the panel was asked to resort the Trust and Counselor Expectations scales by definition. The items selected for all scales were consistently sorted according to their respective definitions by all sorters.

The scales in the SCSCI also demonstrate face validity. Most of the items in the scales were phrased so as to look like questions that belong to that scale. For instance, the Trust scale has questions that state "I trust my counselor." The Student Expectations scale has questions like "I expect my counselor to..."; likewise, for the other scales.

Preliminary Testing of Instrument

The subjects for the preliminary testing of the SCSCI consisted of 156 students in four Western Massachusetts and one eastern New York high schools. Procedures used for data analysis were Cronbach's alpha coefficient of internal consistency, interscale correlations, and item-to-scale correlations. Also, a factor analysis was done using principal components analysis with direct oblimin rotation.

The reliability coefficient for the Trust scale is .9157 and there was one item that would have made the scale .9211 if omitted. Alpha for the Information Channels scale is .8756 with a coefficient of .8926 if one item was omitted. The Student Expectations scale has an alpha of .8619 and no items omitted. Alpha for Counselor Expectations is .8462 with no items omitted. And alpha for Closure of social structure is .6337 and .6918 with one item omitted.

Interscale correlations generally support the premise that these are independent scales. Closure of social structure is obviously separated from the pack because of the low correlations to the other scales. Information Channels and Trust show .8 correlation

but face validity could arguably demonstrate that they are separate scales. For instance, the trust questions are predominately phrased with "I trust my counselor…," and the Information Channels scale is phrased with "I learned from my counselor…" The lower correlations of the remaining scales demonstrate that these are separate scales, yet related, therefore there is evidence of discriminant validity.

Item-to-scale correlations indicate that the items belong in their respective scales. Variables were created for each scale using the sums of each scale. For example, the new Closure scale variable consists of the sum of the Closure items for each respondent. Correlating each item to the scale variable predominantly shows that the items correlate more to their scales than any other scale. There were only three exceptions. Questions 48 and 56 in the information scale were closely correlated to the Trust scale. However, this is not enough of a difference to change items. Also, question 55 in the Closure scale was less correlated to all the other scales. Because there are only 4 items in the Closure scale it was determined to leave the items as is.

Scale Modifications

Minimal modifications were made to the final instrument. Three scales had one item in each that would have slightly altered the alpha coefficient. It was determined that this was not enough to pull the items from the instrument. Question 40, which belonged to the Information Channels scale, will be eliminated because it is a redundant question. The item-to-scale correlations of questions 48, 55, and 56 should have little impact on analyses so they will remain as is. Also, in question 4, a question about

honors classes, an option of zero will be added as a response (see Appendix C for final version).

Overall, the instrument tested well with internal reliability in acceptable ranges for each scale. Interscale correlations showed some evidence of discrimination between scales, and the item-to-scale correlations indicates that the items belong to their respective scales. The factor analysis only showed one factor but more respondents may enable further data reduction.

## Procedures

The final version of the instrument was administered to 412 students across approximately 6 Massachusetts high schools. It consisted of an introduction and consent paragraph, nine demographic questions, and 58 scale questions. Copies of the instrument were given to school counselors for administration, along with a cover letter. Data analysis was similar to the preliminary version. Cronbach's alpha was used to determine scale reliability, and item-to-scale analysis was done to determine that the items correlate to their respective scales. Also, principal components analysis was done to determine the underlying components of the scale.

Evidence has already been built for construct and face validity during the construction of the instrument. Interscale correlation analysis will be done to build discriminant validity.

## Data Analysis

### Reliability

An instrument is reliable if it achieves the same results after repeated administrations. One way to measure reliability is to have more than one administration of the test and see if the scores are correlated. However, that approach was not practical in this situation; therefore, a test of internal consistency is more appropriate.

Cronbach's alpha coefficient of internal consistency was used to measure reliability for each scale. Using SPSS, each scale was analyzed for internal consistency and also to determine alpha when each item is omitted. This approach allows for an examination of the effect each item has on the reliability of the scale.

### Scale-to-Scale Correlations

Scale-to-scale correlations were done to determine the relationship between scales. This procedure was used to determine if one scale is discriminant from another. Each scale was given a score by adding the items for that scale together. A separate variable was created for each scale score. For instance, the score for the Closure variable was calculated by summing the Closure items 30, 43, 54, and 66. There were five scales so a five-by-five correlation matrix was created using a two-tailed test with Pearson correlation coefficient.

Item-to-Scale Correlations

Again, using the Pearson correlation coefficient and the newly created scale variables, matrices were created to analyze the relationship of each item to each scale score. From these matrices, tables were created for each scale showing how each item in the scale related to the other scale variables. This type of analysis determines if each variable belongs to the assigned scale. Each item should correlate most highly with its designated scale score.

Principal Components Analysis

The structure of the instrument was analyzed using principal components analysis. This procedure was used because it is recommended as a first look toward a more detailed factor anaysis by creating an empirical summary of the data set (Tabachnick & Fidell, 1983). Only the items from each scale were used in the analysis. An oblique rotation was used because the components are assumed to be somewhat correlated to each other because they do make up one construct called social capital. Delta was set at zero because the scales are fairly correlated. If items were not correlated, delta would be closer to –1, and toward 1 if they were highly correlated. In SPSS, the direct oblimin procedure provided the oblique rotation.

Extraction was set for eigenvalues over 1 and a delta of 0. Also, the pilot study revealed that there were three components. The final version also revealed three components and that the data fell apart when more extractions were attempted. Therefore, the number of components to be extracted was set at three.

# CHAPTER 4

# RESULTS

The participants for the final administration of the SCSCI consisted of 412 juniors and seniors in five western Massachusetts and one central Massachusetts high school. Participants consisted of 38% male and 62% female. White Americans made up 87% of respondents while 3.6% were Asian American, 2.9% were Latina/o, and 1.9% were African American.

Procedures used for data analysis were the same as the preliminary administration, Cronbach's alpha coefficient of internal consistency, scale-to-scale correlations, and item-to-scale correlations. Also, principal components analysis with direct oblimin rotation was done to determine the structure of instrument. This oblique rotation was chosen because the common factors are assumed to be somewhat related.

## Internal Consistency

### Reliability Coefficient

Cronbach's alpha was used to examine the internal consistency of the instrument. The range for four scales was .87 to .92. In each of these scales there was only one item that, if omitted, raised the Alpha coefficient. However, the increases were negligible and, notably, all items removed were negatively stated questions. At .74, the reliability coefficient for the Closure scale was not as strong as the others. This scale has only 4 items and if one is removed it will increase alpha only marginally, to .78.

Trust is an essential component of social capital. The Trust scale consists of 12 items with two of those formatted as negatively stated items (Q32 and Q58). The reliability coefficient for the Trust scale is .918. There is only one item, Q58a, that increased this coefficient if it were omitted. Also, all the items, except Q21 (.513) and Q58 (.436) had moderate to good correlations ranging from Q11 at .657 to Q 67 at .784. These scores are reported in the Corrected Item-Total Correlations in Table 1. The squared Multiple Correlation is a form of coefficient of determination or r squared. Except for Q21 and Q58a the items range in accounting for 42% (q32a) to 67% (Q67) of shared variance within the total scale.

Table 1. Reliability Analysis for Trust

| N = 12 | | | |
|---|---|---|---|
| Alpha = .918 | | | |
| | Corrected Item-Total Correlation | Squared Multiple Correlation | Alpha if item deleted |
| Q 11 | .657 | .463 | .911 |
| Q 19 | .683 | .498 | .911 |
| Q 21 | .513 | .288 | .917 |
| Q 31 | .745 | .585 | .908 |
| Q 41 | .676 | .500 | .911 |
| Q 44 | .762 | .610 | .907 |
| Q 50 | .707 | .578 | .909 |
| Q 53 | .713 | .530 | .909 |
| Q 57 | .763 | .628 | .907 |
| Q 67 | .784 | .674 | .906 |
| Q 32a | .624 | .422 | .913 |
| Q 58a | .436 | .256 | .924 |

Exchange of resources is another critical component of social capital. The Information Channels scale measures specific resources in the student-counselor relationship. There are 15 items in this scale with one negatively stated (Q16a). Alpha for the Information Channels scale is .916. There is only one item that, if removed,

increases the coefficient and again it is negligible and a negatively stated question. The increase is .001 making Alpha .917 if Q16a is omitted.

The Corrected Item-total Correlations for Q16a and Q55 are .433 and .464 respectively. The other items correlate from moderate to good at .539 (Q14) to .735 (Q20). Except for the two lower correlating items, Q16a and Q55, The squared correlations are moderate to high at .425 (Q42 to .590 (Q20).

Table 2. Reliability Analysis for Information Channels

| N = 15 | | | |
|---|---|---|---|
| ALPHA = .916 | | | |
| | Corrected Item-Total Correlation | Squared Multiple Correlation | Alpha if item deleted |
| Q 14 | .539 | .441 | .914 |
| Q 18 | .705 | .548 | .908 |
| Q 20 | .735 | .590 | .907 |
| Q 24 | .650 | .461 | .910 |
| Q 28 | .608 | .492 | .911 |
| Q 33 | .712 | .578 | .908 |
| Q 40 | .637 | .453 | .910 |
| Q 42 | .597 | .425 | .912 |
| Q 47 | .598 | .391 | .912 |
| Q 51 | .610 | .440 | .911 |
| Q 55 | .464 | .281 | .915 |
| Q 62 | .622 | .541 | .911 |
| Q 63 | .705 | .577 | .908 |
| Q 65 | .701 | .548 | .908 |
| Q16a | .433 | .304 | .917 |

The Student Expectations scale consists of 15 items and has three negatively stated items: 48a, 64a, and 25. The negative questions were randomly sorted throughout the scale; it is by chance that three ended up in this scale. The Alpha coefficient for the Student Expectations scale is .899. Similar to the Trust and Information Channel scales, if one negatively stated question is removed there is a slight increase in the Alpha

coefficient. The increase is .001 and Alpha goes from .899 to .90 with Q64a omitted. Except for Q64a (.378) the items correlated to the scale from moderate to good. Q 48a is .447 and Q60 is the most correlated at .748. Again, the squared multiple correlations range from good to high except Q64a (.254). Questions 48a and 27 account for 34% variance and Question 60 accounts for 64 % of variance.

Table 3. Reliability Analysis for Student Expectations

| N = 15 | | | |
|---|---|---|---|
| ALPHA = .899 | | | |
| | Corrected Item-Total Correlation | Squared Multiple Correlation | Alpha if item deleted |
| Q12 | .456 | .367 | .897 |
| Q13 | .493 | .374 | .895 |
| Q26 | .673 | .494 | .889 |
| Q27 | .484 | .343 | .896 |
| Q35 | .683 | .557 | .888 |
| Q38 | .652 | .469 | .890 |
| Q39 | .640 | .487 | .890 |
| Q45 | .680 | .543 | .888 |
| Q49 | .586 | .398 | .892 |
| Q59 | .640 | .497 | .890 |
| Q60 | .748 | .642 | .886 |
| Q61 | .652 | .510 | .889 |
| Q48a | .447 | .345 | .898 |
| Q64a | .378 | .254 | .900 |
| Q25a | .540 | .411 | .894 |

Alpha for the Counselor Expectations scale is .867. There are nine items in this scale and only one negatively stated item, Q36a. If this item is removed, the Alpha increases .007 from .867 to .874. Q36a also correlates the lowest to the scale with a corrected correlation of .384. The other items correlate moderately to good as demonstrated by Q46 at .556 and Q56 at .699. The squared correlation for Q36a is .182, but the other items show moderate to high correlations from Q46 at.349 to Q17 at. 620.

Table 4. Reliability Analysis for Counselor Expectations

| N = 9 | | | |
|---|---|---|---|
| ALPHA = .867 | | | |
| | Corrected Item-Total Correlation | Squared Multiple Correlation | Alpha if item deleted |
| Q10 | .678 | .608 | .846 |
| Q17 | .682 | .620 | .845 |
| Q23 | .607 | .385 | .853 |
| Q29 | .582 | .361 | .855 |
| Q37 | .592 | .360 | .854 |
| Q46 | .556 | .349 | .858 |
| Q52 | .664 | .453 | .848 |
| Q56 | .699 | .502 | .843 |
| Q36a | .384 | .182 | .874 |

Closure only has four items in the scale. Three of the items deal with the counselors and their relationship to the student's parents. One question, Q54, deals with the counselor and the student's teachers. If this question is removed from the scale, the Alpha coefficient increases from .744. to .781, an increase of .037. Q54 has a corrected correlation of .333, but the other items have good correlations from .649 (Q43) to .578 (Q30). The squared multiple correlation is not applicable to this size scale.

Table 5. Reliability Analysis for Closure

| N = 4 | | | |
|---|---|---|---|
| ALPHA = .744 | | | |
| | Corrected Item-Total Correlation | Squared Multiple Correlation | Alpha if item deleted |
| Q 30 | .578 | NA | .663 |
| Q 43 | .649 | NA | .617 |
| Q 54 | .333 | NA | .781 |
| Q 66 | .609 | NA | .644 |

Item-to-Scale Correlations

Item-to-scale correlations indicate that the items belong in their respective scales (see Tables 6-10). Coefficient Alpha gives a reliability score and a score if one item is deleted. But Alpha does not tell us how each item relates to the other scale variables. Item-to-scale correlations show how each item relates to its own scale and the other scales in the instrument.

Correlating each item to the newly created scale variable predominantly shows that the items correlate more to their scales than any other scale. There were only two exceptions. Questions Q25a in the Student Expectations scale and Q16a in the Information Channels scale. However, The differences were minimal at .006 and .01 respectively. This is not enough of a difference to change items.

Table 6. Item-to Scale Correlations for Counselor Expectations

| Item | **Counselor Expectation** | Student. Expectations | Trust | Information Channels | Closure of social structure |
|---|---|---|---|---|---|
| | | | | | |
| Q10 | **.757** | .424 | .579 | .504 | .414 |
| Q17 | **.775** | .482 | .568 | .518 | .411 |
| Q23 | **.685** | .475 | .479 | .449 | .321 |
| Q29 | **.699** | .415 | .420 | .420 | .335 |
| Q37 | **.674** | .485 | .494 | .470 | .373 |
| Q46 | **.693** | .420 | .408 | .397 | .350 |
| Q52 | **.704** | .480 | .486 | .452 | .341 |
| Q56 | **.768** | .545 | .626 | .579 | .436 |
| Q36a | **.523** | .342 | .276 | .175 | .129 |

The items for the Counselor Expectations scale (Table 6) all correlate most highly with the Counselor Expectations variable (as shown by the bolded correlation coefficients) . These numbers strongly demonstrate that the items do belong in the Counselor Expectations scale. There are not any items that even closely correlate

to the other scales. The closest is Q10 to the Trust scale and that is still .18 difference between the two.

Table 7 demonstrates that the items in the Student Expectations scale correlate most highly with the Student Expectations variable. Question 25a is the exception because it correlates most highly with the Trust scale at .629. However, there is only a .006 difference in correlation because Q25a correlates to the Student Expectations scale at .623.

Table 7. Item-to-Scale Correlations for Student Expectations

| Item | Counselor Expectations | Student. Expectations | Trust | Information Channels | Closure |
|---|---|---|---|---|---|
| Q12 | .348 | **.567** | .317 | .287 | .209 |
| Q13 | .427 | **.542** | .374 | .262 | .191 |
| Q26 | .490 | **.656** | .462 | .385 | .249 |
| Q27 | .255 | **.615** | .276 | .341 | .141 |
| Q35 | .477 | **.720** | .532 | .502 | .377 |
| Q38 | .445 | **.653** | .454 | .381 | .299 |
| Q39 | .403 | **.672** | .453 | .466 | .238 |
| Q45 | .437 | **.733** | .519 | .473 | .365 |
| Q49 | .423 | **.679** | .451 | .440 | .333 |
| Q59 | .475 | **.722** | .552 | .484 | .371 |
| Q60 | .521 | **.782** | .538 | .495 | .420 |
| Q61 | .418 | **.706** | .410 | .447 | .430 |
| Q25a | .522 | .623 | **.629** | .506 | .382 |
| Q48a | .413 | **.536** | .456 | .436 | .211 |
| Q64a | .281 | **.472** | .282 | .152 | .190 |

Similar to the Counselor Expectations scale, the items for the Trust scale all correlate most highly with the Trust variable (Table 8). In general, the items for the Information Channel scale are the second highest correlations. This is consistent with the inter-scale relationship, but they are far enough apart to distinguish one from the other.

Table 8. Item-to-Scale Correlations for Trust

| Item | Counselor Expectations | Student. Expectations | Trust | Information Channels | Closure |
|---|---|---|---|---|---|
| Q11 | .536 | .480 | **.724** | .537 | .382 |
| Q19 | .539 | .466 | **.725** | .505 | .458 |
| Q21 | .340 | .348 | **.614** | .406 | .280 |
| Q31 | .548 | .477 | **.745** | .555 | .480 |
| Q41 | .505 | .564 | **.727** | .676 | .431 |
| Q44 | .594 | .495 | **.779** | .601 | .547 |
| Q50 | .525 | .556 | **.777** | .613 | .429 |
| Q53 | .535 | .398 | **.730** | .542 | .433 |
| Q57 | .565 | .553 | **.798** | .681 | .516 |
| Q67 | .605 | .603 | **.823** | .693 | .556 |
| Q32a | .494 | .448 | **.698** | .523 | .353 |
| Q58a | .288 | .313 | **.546** | .389 | .392 |

Information Channels has 15 items and 14 of those correlate most highly with the Information Channels scale. Again, it is a negatively stated number that shows a slightly higher correlation to another scale variable. The difference is .015.

Table 9. Item-to-Scale Correlations for Information Channels

| Item | Counselor Expectations | Student. Expectations | Trust | Information Channels | Closure |
|---|---|---|---|---|---|
| Q14 | .290 | .333 | .418 | **.640** | .273 |
| Q18 | .523 | .498 | .690 | **.738** | .456 |
| Q20 | .468 | .495 | .619 | **.777** | .436 |
| Q24 | .462 | .507 | .550 | **.710** | .529 |
| Q28 | .266 | .373 | .447 | **.692** | .290 |
| Q33 | .396 | .463 | .566 | **.777** | .473 |
| Q40 | .499 | .503 | .627 | **.670** | .408 |
| Q42 | .400 | .422 | .549 | **.636** | .373 |
| Q47 | .533 | .454 | .533 | **.643** | .455 |
| Q51 | .381 | .426 | .563 | **.590** | .341 |
| Q55 | .487 | .362 | .460 | **.519** | .394 |
| Q62 | .341 | .457 | .431 | **.715** | .394 |
| Q63 | .435 | .440 | .565 | **.762** | .455 |
| Q65 | .530 | .469 | .683 | **.728** | .506 |
| Q16 a | .422 | .413 | **.525** | .515 | .336 |

Closure is the smallest scale with only four items. However, these items demonstratively correlate with the Closure variable.

Table 10. Item-to-Scale Correlations for Closure

| Item | Counselor Expectations | Student. Expectations | Trust | Information Channels | Closure |
|---|---|---|---|---|---|
| Q30 | .309 | .307 | .368 | .486 | **.781** |
| Q43 | .304 | .310 | .326 | .384 | **.840** |
| Q54 | .482 | .403 | .460 | .463 | **.561** |
| Q66 | .474 | .421 | .560 | .512 | **.800** |

## Scale-to-Scale Correlations

It is expected that the scales will be somewhat related, but not related enough to make them indistinguishable from each other. The newly created scale variables were correlated to determine if they are related.

Scale-to-scale correlations generally support the premise that these are independent scales (see Table 11). Closure of social structure is obviously separated from the pack because of the low correlations to the other scales. The lowest score for Closure is .48 and the highest is .6.

Table 11. Scale-to-Scale Correlations

| | Counselor Expectations | Trust | Student Expectations | Information Channels | Closure |
|---|---|---|---|---|---|
| Counselor Expectations | 1 | .688 | .661 | .616 | .483 |
| Trust | | 1 | .682 | .795 | .602 |
| Student Expectations | | | 1 | .615 | .445 |
| Information Channels | | | | 1 | .607 |
| Closure of Social Structure | | | | | 1 |

Information Channels and Trust report a score of .79, which could raise the question of whether these are the same measures. But face validity could arguably demonstrate that they are separate scales. For instance, the Trust questions are predominately phrased with "I Trust my counselor…", and the Information Channels scale is phrased with "I learned from my counselor…". The lower correlations of the

remaining scales demonstrate that these are separate scales, yet related, therefore there is evidence of discriminant validity.

## Principal Components Analysis

The principal components analysis produced 14 components that had eigenvalues over 1. However, only one clear factor emerges as seen more clearly in the scree plot (see Figure 3). But three components are justified given the scree and the component loadings in Tables 12-16. Component number one accounts for 33% of variance while the next closest component accounts for 6% of variance. It can be determined that there are three components to the scale. The first is obvious with an eigenvalue in the low 20's. The second and third were determined through trial and error. When computing number of component it was specific at two, three, four, and five components. After three, the loadings fell apart, and the components became diluted. Given the scree plot, the loadings, and the trial and error it was determined that there were three components.

Ideally all the items would load according to the assigned scales. This would mean that the components of the instrument match the theoretical constructs. This analysis does not completely match theoretically, but there are indications that two of the components match the constructs. Three scales loaded to component number one, and two did match their theoretical constructs.

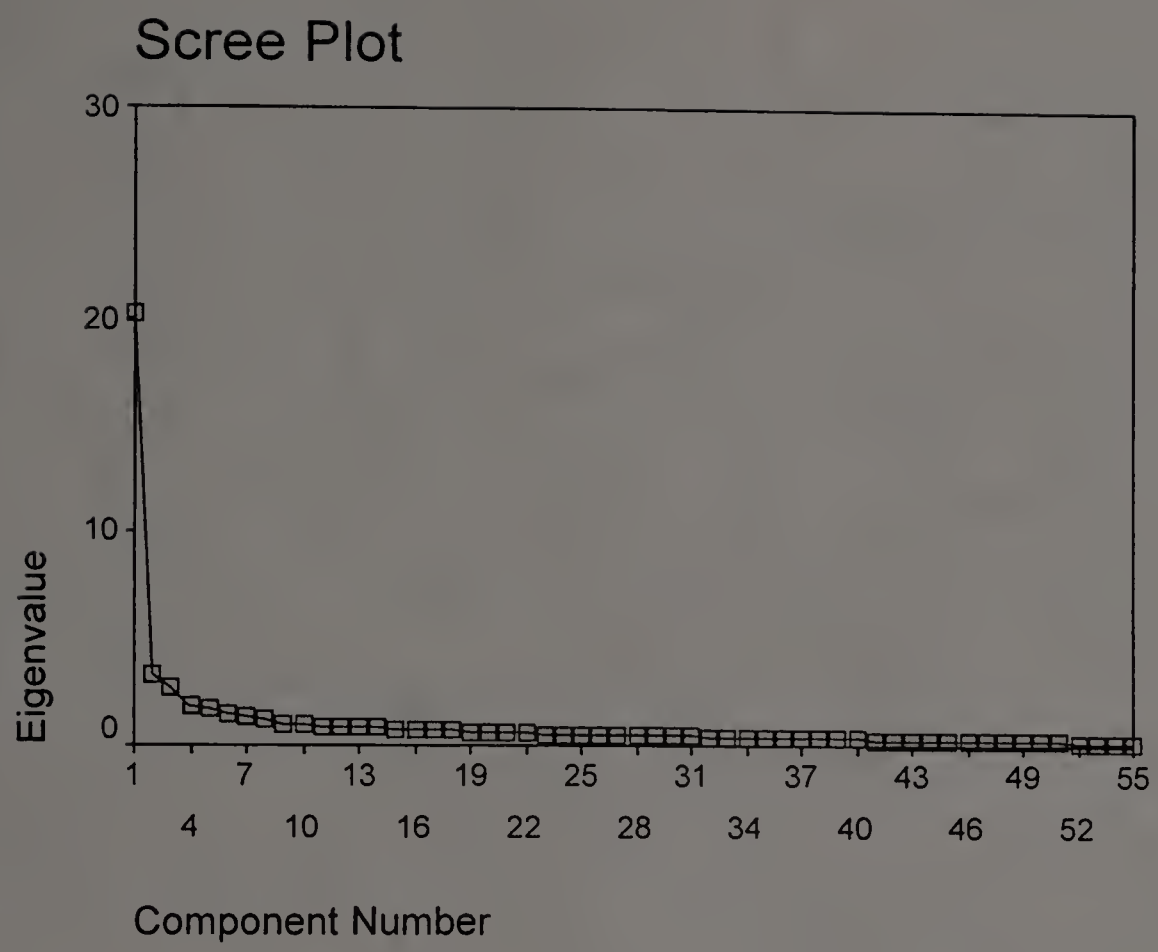


Figure 3. Scree Plot

The next set of tables is the component loadings by scale. This demonstrates that some of the items loaded to their corresponding scales. For instance, the items for the Student Expectations scale predominantly loaded component number three. There are 15 items for this scale and 13 of them loaded together on component three.

The Information Channels scale could conceivably be considered component number two. There are 15 items for this scale and 6 loaded onto component number two. However, there are four more that could be considered close to loading on component 2. For instance Q63 loaded .590 onto number one while the loading for number two is .569.

Table 12. Principal Component Analysis for Student Expectations

| | Component # 1 | Component # 2 | Component # 3 |
|---|---|---|---|
| Q12 | .291 | -.068 | **.556** |
| Q13 | .404 | .079 | **.566** |
| Q25A | **.720** | -.067 | .475 |
| Q26 | .502 | .005 | **.721** |
| Q27 | .175 | -.159 | **.623** |
| Q35 | .498 | -.146 | **.716** |
| Q38 | .470 | .022 | **.696** |
| Q39 | .416 | -.159 | **.733** |
| Q45 | .497 | -.164 | **.736** |
| Q48A | **.521** | .084 | .416 |
| Q49 | .387 | -.209 | **.687** |
| Q59 | .488 | -.216 | **.703** |
| Q60 | .551 | -.122 | **.792** |
| Q61 | .422 | -.160 | **.745** |
| Q64A | .330 | .169 | **.357** |

Table 13. Principal Component Analysis for Information Channels

| | Component # 1 | Component # 2 | Component # 3 |
|---|---|---|---|
| Q14 | .328 | **.587** | .293 |
| Q16A | .619 | -.145 | .303 |
| Q18 | .643 | -.519 | .461 |
| Q20 | .578 | **-.585** | .465 |
| Q24 | .602 | -.503 | .352 |
| Q28 | .337 | **-.699** | .323 |
| Q33 | .532 | **-.653** | .399 |
| Q40 | .617 | -.408 | .421 |
| Q42 | .504 | **-.518** | .342 |
| Q47 | .605 | -.359 | .408 |
| Q51 | .589 | -.374 | .354 |
| Q55 | .616 | -.130 | .315 |
| Q62 | .388 | **-.673** | .402 |
| Q63 | .590 | -.569 | .395 |
| Q65 | .686 | -.496 | .362 |

The remaining three scales load onto component number one. These are Counselor Expectations, Trust, and Closure of Social Structure. There is a total of 21 items that loaded onto this component.

Table 14. Principal Component Analysis for Trust

| | Component # 1 | Component # 2 | Component # 3 |
|---|---|---|---|
| Q11 | **.683** | -.192 | .444 |
| Q19 | **.745** | -.117 | .407 |
| Q21 | **.514** | -.186 | .319 |
| Q31 | **.765** | -.217 | .445 |
| Q2a | **.728** | -.146 | .327 |
| Q41 | **.654** | -.468 | .501 |
| Q44 | **.804** | -.226 | .423 |
| Q50 | **.718** | -.368 | .499 |
| Q53 | **.759** | -.219 | .387 |
| Q57 | **.755** | -.411 | .454 |
| Q58a | **.451** | -.213 | .186 |
| Q67 | **.801** | -.381 | .518 |

Table 15. Principal Component Analysis for Counselor Expectations

| | Component # 1 | Component # 2 | Component # 3 |
|---|---|---|---|
| Q10 | **.689** | -.054 | .407 |
| Q17 | **.690** | -.084 | .467 |
| Q23 | **.584** | -.037 | .488 |
| Q29 | **.538** | -.006 | .426 |
| Q36A | **.390** | .327 | .293 |
| Q37 | **.624** | -.041 | .517 |
| Q46 | **.572** | .043 | .438 |
| Q52 | **.610** | .088 | .531 |
| Q56 | **.705** | -.119 | .545 |

Table 16. Principal Component Analysis for Closure

| | Component # 1 | Component # 2 | Component # 3 |
|---|---|---|---|
| Q30 | **.426** | -.450 | .214 |
| Q43 | **.409** | -.336 | .198 |
| Q54 | **.604** | -.056 | .368 |
| Q66 | **.622** | -.390 | .276 |

## Summary of Results

The results of the analyses indicate that the instrument is internally consistent and the scales are discriminable. Internal consistency analysis consisted of Cronbach's Alpha and item-to-scale correlations. Alpha coefficients for the five scales ranged between .918 (Trust) and .744 (Closure). Except for one or two items in each scale the corrected item total correlations ranged from moderate to good. When all items were correlated to all scales all the items in the Counselor Expectations, Trust, and Closure scales correlated most highly with its respective scale. Only one item in the Information Channels and Student Expectations scales correlated more highly to another scale. The scale-to-scale correlations showed that the scales were somewhat discriminable except Information Channels and Trust (.795). The lowest correlation was .445 between Closure and Student Expectations. The remaining correlations were between .602 and .688.

Principal Components Analysis was used to determine three components. The first contributed to 33% of the variance and and all the items in the Trust, Counselor Expectations, and Closure scales loaded onto component one. Six out of 15 items in the information Channel scale loaded onto component two, but two thirds of the items

either loaded onto this scale or were very close to it. All but two of the Student Expectations items loaded onto component three.

# CHAPTER 5

# CONCLUSION

## Conclusion

### Internal Consistency

The purpose of this research was to develop and evaluate an instrument that measures the social capital in the student-school counselor relationship. This study addressed the question of whether a theory-based instrument can be developed that measures social capital by student self-report and that has reliable and discriminable scales. Based on the results reported in chapter four, the conclusion is that the School Counselor Social Capital Instrument has reliable and discriminable scales.

Reliability analysis was one measure used to determine internal consistency. Cronbach's alpha was used to examine the reliability of the scales and the coefficient range for four scales was .87 to .92. These scores are considered to have high reliability. The reliability coefficient for the Closure scale was not as strong as the others at .74. However with one item removed it increased to .78, not a significant increase.

There is more evidence to support the internal consistency of the scales in the Corrected Total-Item Correlations and the Squared Multiple Correlations. For each of these measures in each scale there were only one or two items that demonstrated a weak correlation. All the others were moderate to high correlations.

Another indicator of the internal consistency of the scales is the item-to-scale correlations. These indicate that the items belong in their respective scales. Item-to-

scale correlations show how each item relates to its own scale and the other scales in the instrument. There is strong evidence that each item correlates most highly with its scale. Out of all the items in each scale, there were only one or two items that did not correlate most highly with their respective scales.

Discriminable Scales

There is evidence to support the conclusion that the scales are separate and distinct and that they measure what they purport. It is expected that the scales will be somewhat related, but not related enough to make them indistinguishable from each other. The scale variables were correlated to determine if they are related.

Scale-to-scale correlations generally support the premise that these are subsets of the instrument and relatively independent of each other (see Table 11). Closure of Social Structure is separated from the pack because of the low correlations to the other scales.

Information Channels and Trust correlate at .79, which could raise the question of whether these scales measure the same thing. But face validity could arguably demonstrate that they are sub-scales. For instance, the trust questions are predominantly phrased with "I trust my counselor…", and the information channels scale is phrased with "I learned from my counselor…". The lower correlations of the remaining scales demonstrate that these are separate scales, yet related; therefore there is evidence of discriminant validity.

Principal components analysis was used to determine the factor structure of the instrument. This analysis produced 14 components with eigenvalues greater than one.

While there is one major component that emerges, three components are justified given the scree and the component loadings. The first is obvious with an eigenvalue in the low 20's. The second and third were determined through trial and error based upon the interpretability of the results. When computing number of component it was specified at two, three, four, and five components. After three components, the loadings fell apart, and they became diluted. Given the scree plot, the loadings, and the trial and error it was determined that there were three components.

Ideally, all the items would load according to the assigned scales. This would mean that the components of the instrument match the theoretical constructs. This analysis does not completely match theoretically, but there are indications that two of the components match the constructs. Three scales loaded to component number one, and two did match their theoretical constructs.

The component loadings demonstrate that some of the items loaded to their corresponding scales. For instance, the items for the Student Expectations scale predominantly loaded on to component number three. There are 15 items for this scale and 13 of them loaded together on component three.

The Information Channels scale could conceivably be considered component number two. There are 15 items for this scale and 6 loaded onto component number two. However, there are four more that could be considered close to loading on component 2. For instance, Q63 loaded .590 onto number one while the loading for number two is .569.

The remaining three scales load onto component number one. These are Counselor Expectations, Trust, and Closure of Social Structure. A total of 21 items loaded onto this component.

The procedures used to create the instrument also build evidence to show that scales are discriminable. There is evidence of face validity. The Trust scale has questions predominantly phrased with "I trust my counselor to…..," and the items in the Counselor Expectation scale are phrased with "My counselor expects me to…" Also, the items in the Student Expectations scale are phrased with "I expect my counselor to….," and the items in the Information Channels scale start with " I learned how to ….." Besides face validity, construct validity was built by the Q sort. The experts sorted the questions by construct definition until the items sorted nearly unanimously.

Given the reliability coefficients, corrected item-total correlations, squared multiple correlations, and item-to-scale correlations, it can be concluded that the scales are reliable. It can also be concluded that the scales are discriminable as evidenced by the scale-to-scale correlations, principal component analysis, and face and construct validity.

## Discussion

Research indicates that social capital benefits families and communities by positively influencing academic outcomes and behaviors. The research further indicates that schools, as a source of community capital, affect student outcomes, and that teachers and counselors can be sources of social capital as well. And, to take it one step

further, research also indicates that community social capital can compensate for the lack of social capital in the home.

The SCSCI should be able to add to and verify some of these findings, specifically with reference to the role of school counselors in affecting positive development and achievement. However, the most salient aspect of the SCSCI is how it addressed some of the limitations of the existing research. Chapter 2 outlined three major limitations to the extant research: lack of clear definition, students as agents, and exchange of resources. This study does not present information that students do create their own social capital, or that they are involved in an exchange of resources. But it does present to the field an instrument that can be used to address some of these issues.

Conceptualizing social capital by applying Coleman's theory to the student-counselor relationships should alleviate some of the vagueness of definition that is problematic in predominant social capital research. Five constructs were clearly defined as: Trust, Student Expectations, Counselor Expectations (as perceived by the student), Information Channels, and Closure of Social Structure. These scales were shown to be clearly defined, reliable, and discriminable.

The vast majority of the prevalent research does not address the student's role in creating social capital. The extant research addresses parents, community, and school in creating capital, but not the students themselves. This research addresses this gap by surveying students directly about their perceptions of social capital indicators. The SCSCI is a student self-report on the elements of social capital as defined by the constructs. Assessing whether students trust their counselors or feel like their counselors have high expectations will enable researchers to determine levels of social capital.

After all, a student's healthy development depends on regular opportunities to construct supportive relationships with caring significant others within the schools.

Exchange of Resources

Because previous studies have used inadequate measures of social capital (e.g., using indirect variables from large data sets), determining directionality or exchange of resources is problematic (Dika, 2002). The constructs on this instrument are clearly defined and administered directly to the student.

The Information Channels scale deals specifically with information that the student actually receives from the institution. This scale goes to the heart of social capital and the equitable distribution of resources for all students. It is encouraging that this scale had an Alpha of .91 and that all but one of the items correlated most highly to the Information Channels scale. Also, a majority of the items in this scale either loaded onto component two or came very close. This is a strong scale that will be able to identify an exchange of resources.

Besides addressing limitations to the existing research, the SCSCI deals specifically with school counselors. There are no other studies that deal with social capital and school counselors. Now there is an instrument that is reliable and discriminable that school counselors can use in many ways and which can be adapted for broader use.

## Limitations

There are three areas in this study that are somewhat limited. The size of the participant samples, the strength of validity, and the component analysis. The

participants of the study were not a representative sample because there were only 412 from five schools in Massachusetts. Eighty-seven percent of the participants were white and 62% were female. The homogeneous sample may have contributed to the strong psychometric results. However, further content analysis may be hampered by the homogeneity.

More validity testing could be done on the instrument. The Q sort helped build face and construct validity and the scale-to-scale correlations help build discriminant validity. However, social capital as a whole construct needs to be explored. Validity would be strengthened if each scale demonstrated evidence of convergent or discriminant validity. For instance, the results of the trust scale could be compared to other instruments that measured trust to see if they correlate or not.

Principal Components Analysis can be thought of as an empirical summary of the data and is recommended as the first step in data reduction (Tabachnick & Fidell, 1983). The principal component analysis would be strengthened if there were more participants. With more participants a more detailed analysis could be done.

## Implications

There are two main research implications arising from this study: research on the instrument itself and research on school counselors using the instrument. Research on the instrument would involve a large stratified random sample of participants to confirm reliability and factor structure and to generate useful norms. A national study involving 10,000 students would enable an in-depth analysis of the psychometric properties of the instrument. For instance, a factor analysis could be done where more

than three factors may be designated. The item-to-scale correlations could be enhanced by applying item response theory. A more in-depth validity study could be done comparing the instrument and the scales of the instrument to postsecondary outcomes such as college entrance. Each scale could also be tested for convergent or discriminant validity against comparable trust instruments or expectations instruments.

The implications for research with school counselors may be as diverse as the school counselors themselves. Hopefully, this will stimulate some research and discussion within the field. But some practical implications are to use the large stratified random sample administration of the instrument to analyze the content of the data. If the constructs defined by the five scales in this instrument are normalized across spectrums, then some generalizations may be discovered that may influence student achievement.

For example, if less advantaged high school students who do not do as well on their SAT's also report low social capital, then we may begin to understand some of the barriers to success. A large data set would allow the information to be disaggregated by ethnicity, income, sex, etc. A study of this size may help pinpoint a subgroup and determine if lack of trust or low expectations in this group contributed to low scores.

This type of analysis does not have to occur with just large data sets. Counselors could use the instrument to evaluate their school or district. Counselors may not be able to control for all of the student variables that contribute to low achievement, but they can control for the institutional variables such as sorting students based on certain expectations of those students. The SCSCI is an instrument that can assist counselors in identifying which students are receiving resources and which ones are not. And, the

instrument can assist counselors in determining why these students are not receiving the resources, whether it is low expectations or a lack of trust by the students.

Whether using large data sets or school-wide data determining directionality or cause-and-effect would be another area for future research. Determining if high social capital in the student-school counselor relationship accounts for high achievement would have implications on the way school counselors conduct business. Policies and curriculum could be designed to increase areas of social capital that are known to increase achievement.

This instrument also collects demographic information such as level of parent education, honors classes taken, reported grades, aspirations, sex, and ethnicity. When this information is analyzed with scale information such as expectations, trust, and information channels, counselors can determine which groups have high aspirations or which groups are taking honors classes. Or, more importantly, they can determine which are not. Given this information, counselors can develop curriculum to address some of the shortcomings revealed by the administration of the instrument.

The SCSCI has items that are associated to scales, demographics, and it also asks questions about delivery system of the resources. These questions ask about the effectiveness of the counselor's mode of operation. For instance, the SCSCI can determine if students perceived that they learned more from a one-on-one session with counselor. Or it can determine if students learned more from small groups or whole-school interventions. This is important because many schools are adopting the American School Counselor's National Frameworks, which advocates for these types of delivery systems.

## Overall Summary

A social capital perspective on school counseling practices can help counselors determine what works best to ensure an equitable distribution of school resources. Social capital examines issues of trust, expectations, networks, and exchange of information. A social capital perspective can help identify barriers to student success and help facilitate the flow of school resources from institution to student.

The achievement gap exists because we continually expect less from poor and minority students (House & Martin, 1998). Low expectations of students is an institutional barrier to student success, and high expectations for all students unlocks institutional resources unavailable to students because now they are expected to take full advantage of the resources offered. For instance, if all students are expected to do well, counselors will recommend tutoring and study skills workshops to all who need them. If students are not expected to do well, counselors become gatekeepers and sorters, determining who gets access to resources and who does not.

Counselors must work as change agents and advocates for the elimination of systemic barriers that impede academic success for all students. School counselors need to become leaders in overcoming the institutional barriers that continue to result in the achievement gap between poor and minority students and their more advantaged peers. Counselors need to work proactively to remove barriers to learning by teaching students how to help themselves via improved organizational skills study skills, and test taking skills. School counselors are also called upon to teach students and families how to

manage the school bureaucracy and how to access support systems (House & Hayes, 2002; House & Martin, 1998).

There is currently no research that deals specifically with school counselors and social capital. However, there is research that indicates that social capital in the home, the community, and the school can positively affect student achievement. Most of this research was done using large data sets with indirect indicators of social capital. This resulted in a lack of clear definition of social capital, in not accounting for students as agents, and in not determining an exchange of resources.

Also, research documenting that students are more academically successful as a result of school counselor action is limited (Martin, 2002). The School Counselor Social Capital Instrument can help counselors discern if barriers exist and what resources are actually getting to the student. The instrument focuses on trust, expectations, networks, and information channels. The instrument addresses the limitations of existing research. A social capital perspective and the SCSCI can help counselors determine if they are effective in eliminating institutional barriers and determining what resources are getting to which students. This can be an effective tool in helping close the achievement gap.

The procedures used to create and analyze the data were direct and rigorous. Constructs were defined and items created. Experts sorted items and a pilot study was done. The results of this study were promising so a larger study was conducted with 412 participants. Data analysis consisted of reliability, item-to-scale correlations, scale-to-scale correlations, and principal component analysis.

The reliability coefficients ranged from .74 to .91. In each scale there were only one or two items that did not correlate to their respective scales. The scale-to-scale

analysis indicates that the scales are discriminable. But the Trust and Information Channels scales did have a higher correlation; however, face validity discriminates one scale from the other. Three components were derived from the principal components analysis and the Student Expectations scale loaded almost entirely onto the third component. The majority of the Information Channels scale loaded very close to the second component, and the rest of the scales loaded onto component one.

It can be concluded that these scales are reliable and discriminable. These results should allow for further study of the instrument and in the field. Studying a larger sample can strengthen the psychometric properties of the instrument, and normative data may materialize as a result. Counselor can use the instrument in their school or district to help identify barriers to student success. Data may be disaggregated to assist counselors in closing the achievement gap.

# APPENDIX A

# ITEMS BY SCALE

Items by scale

Counselor expectations

8. My Counselor(s) expects me to do the best I can.
9. Counselors have expected me to take responsibility for my choices.
10. Counselors expect me to act in a mature manner.
11. Counselors expect me to take challenging courses.
12. Counselors expect me to reach high when setting future goals.
13. Counselors expect me to work hard to attain my goals.
14. Counselors do not expect me to do all my school work.
15. Counselors expect me to be involved in my future plans.
16. Counselors expect me to make smart decisions.

Trust

17. I trust my counselor to give me good advice.
18. My counselor is honest.
19. My counselor is a safe person to talk to.
20. My counselor respects and listens to my opinion.
21. My counselor is not fair.
22. I can count on my counselor for help when I need it.
23. My counselor would not criticize me.
24. My counselor is dependable.
25. My counselor is sensitive to my personal needs.
26. I trust my counselor to give me good advice when making important decisions.
27. I do not have a personal relationship with my counselor.
28. I trust my counselor to keep our conversations confidential.

Student expectations

29. I expect encouragement from my counselor.
30. I expect my counselor to help with personal problems as well as academic issues.
31. I expect my counselor to be a good role model.
32. I expect my counselor to work to ensure my success after high school.
33. I do not expect my counselor to monitor my school progress.
34. I expect my counselor to be available when I need to talk to them.
35. I expect my counselor to take responsibility for helping me succeed in school.
36. I expect my counselor to be a source of support.
37. I expect my counselor to make sure that I receive the help I need.
38. I expect my counselor to take an interest in my well-being.
39. I expect my counselor to follow through on the things s/he said.
40. I do not expect my counselor to give me good advice.
41. I expect my counselor to do a good job.
42. I expect my counselor to reach out to me in order to help.

I expect my counselor to make sure that I get the help that I need from school.

Information channel
43. My counselor has helped me learn things that influenced my future plans.
44. Counselor knew about extracurricular activities that I might like.
45. I learned how to make important decisions from my counselor.
46. My counselor can help me find an internship.
47. I learned good study habits from my counselor.
48. I learned how to manage uncomfortable situations with my peers from my counselor. SA, A, N, D, SD
49. I learned organizational skills from my counselor.
50. If my counselor could not help me, s/he knew someone that could.
51. Counselor knew how to manage the school bureaucracy in order to help me.
52. I learned how to make plans for after high school from my counselor.
53. My counselor did not know what classes I needed to achieve my future plans
54. My counselor taught me how to make good decisions.
55. My counselor knows how to help me get a job after high school.
56. My counselor knows the financial aid process.
57. My counselor knows what colleges are a good match for me.
58. My counselor taught me how to set goals for myself.

Closure of social structure
59. My counselor involves my parent(s) or guardian(s) in my school experience.
60. My counselor knows my parent(s) or guardian(s)
61. My counselor knows my teachers
67. My parent(s) or guardian(s) feel comfortable calling my counselor.

# APPENDIX B

# PRELIMINARY INSTRUMENT

**Student Survey**

I am a graduate student from the School of Education at U-Mass-Amherst studying student-counselor relationships. This questionnaire is optional, but I would greatly appreciate your participation. By completing the answer form you are consenting to participate in the study. Do not write your name on the form because all information is confidential. Thank you very much for your assistance.

1. Name of High School _____

**Circle one answer that best fits for you.**

2. I am male - female
3. What grade are you in? 9 – 10 – 11 – 12
4. How many honors classes will you take this year? 1 – 2 – 3 – 4 – 5 – 6 – 7 or more
5. My GPA is A, AB, B, BC, C, CD, D, DF, F
6. How would you best describe yourself? Latino/a, White American, African American, Asian American, Other _____
7. Highest level of parental/guardian education, Graduate school, 4 year college, 2 year college, High school Grad, Did not finish High School
8. I have met with my counselor (not including disciplinary issues) 1-3 times, 4-6 times, 7-9 times, 10 or more times
9. After High School I plan to go to, 4year college, 2 year college, military, work, apprenticeship/ trade school

**Circle One (SD = strongly disagree, D= disagree, N= neutral, A= agree, SA= strongly agree)**

10. SD, D, N, A, SA, My counselor expects me to do the best I can.
11. SD, D, N, A, SA, I trust my counselor to keep our conversations confidential.
12. SD, D, N, A, SA,. I expect my counselor to be available when I need to talk to them.
13. SD, D, N, A, SA, I expect my counselor to follow through on the things s/he said.
14. SD, D, N, A, SA,. I learned how to manage uncomfortable peer situations from my counselor.
15. **SD, D, N, A, SA, I learned a lot from my counselor when we met in small groups.**
16. SD, D, N, A, SA,. My counselor did not know what classes I needed to achieve my future plans
17. SD, D, N, A, SA,. My counselor expects me to work hard to attain my goals.
18. SD, D, N, A, SA, My counselor has helped me learn things that influenced my future plans.
19. SD, D, N, A, SA, My counselor is honest.
20. SD, D, N, A, SA, My counselor taught me how to set goals for myself.
21. SD, D, N, A, SA, My counselor would not criticize me.
22. **SD, D, N, A, SA, I learned a lot from my counselor when s/he met with my class.**
23. SD, D, N, A, SA, My counselor expects me to take responsibility for my choices.
24. SD, D, N, A, SA, My counselor knew about extracurricular activities that I might like.
25. SD, D, N, A, SA, I do not expect my counselor to give me good advice.
26. SD, D, N, A, SA, I expect encouragement from my counselor.
27. SD, D, N, A, SA, I expect my counselor to take responsibility for helping me succeed in school.
28. SD, D, N, A, SA, I learned how to be organized from my counselor.
29. SD, D, N, A, SA, My counselor expects me to do all my school work.

30. SD, D, N, A, SA, My counselor involves my parent(s) or guardian(s) in my school experience.
31. SD, D, N, A, SA, My counselor is a safe person to talk to.
32. SD, D, N, A, SA, My counselor is not dependable.
33. SD, D, N, A, SA, My counselor taught me how to make good decisions.
**34. SD, D, N, A, SA, I learned a lot from my counselor when we met one on one.**
35. SD, D, N, A, SA, I expect my counselor to be a source of support.
36. SD, D, N, A, SA, My counselor does not expect me to act in a mature manner.
37. SD, D, N, A, SA, My counselor expects me to be involved in my future plans.
38. SD, D, N, A, SA, I expect my counselor to do a good job.
39. SD, D, N, A, SA, I expect my counselor to help with personal and academic issues.
40. SD, D, N, A, SA, I learned how to make important decisions from my counselor.
41. SD, D, N, A, SA, If my counselor could not help me, s/he knew someone that could.
42. SD, D, N, A, SA, My counselor is sensitive to my personal needs.
43. SD, D, N, A, SA, My counselor knows how to help me get a job after high school.
44. SD, D, N, A, SA, My counselor knows my parent(s) or guardian(s)
45. SD, D, N, A, SA, My counselor respects and listens to my opinion.
46. SD, D, N, A, SA, I expect my counselor to make sure that I receive the help I need.
47. SD, D, N, A, SA, My counselor expects me to take challenging courses.
48. SD, D, N, A, SA, My counselor can manage the school bureaucracy in order to help me.
49. SD, D, N, A, SA, I do not expect my counselor to be a good role model.
50. SD, D, N, A, SA, I expect my counselor to reach out to me in order to help.
51. SD, D, N, A, SA, I trust my counselor to help me when making important decisions.
52. SD, D, N, A, SA, My counselor can help me find an internship.
53. SD, D, N, A, SA, My counselor expects me to make smart decisions.
54. SD, D, N, A, SA, My counselor is fair.
55. SD, D, N , A, SA, My counselor knows my teachers.
56. SD, D, N, A, SA, My counselor knows the financial aid process.
57. SD, D, N, A, SA, My counselor expects me to reach high when setting future goals.
58. SD, D, N, A, SA, I can count on my counselor for help when I need it.
59. SD, D, N, A, SA, I do not have a personal relationship with my counselor.
60. SD, D, N, A, SA, I expect my counselor to make sure that I get the help that I need from school.
61. SD, D, N, A, SA, I expect my counselor to take an interest in my well-being.
62. SD, D, N, A, SA, I expect my counselor to work to ensure my success after high school.
63. SD, D, N, A, SA, I learned good study habits from my counselor.
64. SD, D, N, A, SA, I learned how to make plans for after high school from my counselor.
65 .SD, D, N, A, SA, I do not expect my counselor to monitor my school progress.
66. SD, D, N, A, SA, My counselor knows what colleges are a good match for me.
67. SD, D, N, A, SA, My parent(s) or guardian(s) feel comfortable calling my counselor.
68. SD, D, N, A, SA, I trust my counselor to give me good advice.

# APPENDIX C

# FINAL VERSION OF INSTRUMENT

## Student Survey

I am a graduate student from the School of Education at U-Mass-Amherst studying student-counselor relationships. This questionnaire is optional, but I would greatly appreciate your participation. By completing the answer form you are consenting to participate in the study. Do not write your name on the form because all information is confidential. Thank you very much for your assistance.

1. Name of High School _____

**Circle one answer that best fits for you.**

2. I am male - female
3. What grade are you in? 9 – 10 – 11 – 12
4. How many honors classes will you take this year? 0 -- 1 – 2 – 3 – 4 – 5 – 6 – 7 or more
5. My GPA is A, AB, B, BC, C, CD, D, DF, F
6. How would you best describe yourself? Latino/a, White American, African American, Asian American, Other _____
7. Highest level of parental/guardian education, Graduate school, 4 year college, 2 year college, High school Grad, Did not finish High School
8. I have met with my counselor (not including disciplinary issues) 1-3 times, 4-6 times, 7-9 times, 10 or more times
9. After High School I plan to go to, 4year college, 2 year college, military, work, apprenticeship/ trade school

**Circle One (SD = strongly disagree, D= disagree, N= neutral, A= agree, SA= strongly agree)**

10. SD, D, N, A, SA, My counselor expects me to do the best I can.
11. SD, D, N, A, SA, I trust my counselor to keep our conversations confidential.
12. SD, D, N, A, SA,. I expect my counselor to be available when I need to talk to them.
13. SD, D, N, A, SA, I expect my counselor to follow through on the things s/he said.
14. SD, D, N, A, SA,. I learned how to manage uncomfortable peer situations from my counselor.
15. **SD, D, N, A, SA, I learned a lot from my counselor when we met in small groups.**
16. SD, D, N, A, SA,. My counselor did not know what classes I needed to achieve my future plans
17. SD, D, N, A, SA,. My counselor expects me to work hard to attain my goals.
18. SD, D, N, A, SA, My counselor has helped me learn things that influenced my future plans.
19. SD, D, N, A, SA, My counselor is honest.
20. SD, D, N, A, SA, My counselor taught me how to set goals for myself.
21. SD, D, N, A, SA, My counselor would not criticize me.
22. **SD, D, N, A, SA, I learned a lot from my counselor when s/he met with my class.**
23. SD, D, N, A, SA, My counselor expects me to take responsibility for my choices.
24. SD, D, N, A, SA, My counselor knew about extracurricular activities that I might like.
25. SD, D, N, A, SA, I do not expect my counselor to give me good advice.
26. SD, D, N, A, SA, I expect encouragement from my counselor.
27. SD, D, N, A, SA, I expect my counselor to take responsibility for helping me succeed in school.
28. SD, D, N, A, SA, I learned how to be organized from my counselor.
29. SD, D, N, A, SA, My counselor expects me to do all my school work.

30. SD, D, N, A, SA, My counselor involves my parent(s) or guardian(s) in my school experience.
31. SD, D, N, A, SA, My counselor is a safe person to talk to.
32. SD, D, N, A, SA, My counselor is not dependable.
33. SD, D, N, A, SA, My counselor taught me how to make good decisions.
**34. SD, D, N, A, SA, I learned a lot from my counselor when we met one on one.**
35. SD, D, N, A, SA, I expect my counselor to be a source of support.
36. SD, D, N, A, SA, My counselor does not expect me to act in a mature manner.
37. SD, D, N, A, SA, My counselor expects me to be involved in my future plans.
38. SD, D, N, A, SA, I expect my counselor to do a good job.
39. SD, D, N, A, SA, I expect my counselor to help with personal and academic issues.
40. SD, D, N, A, SA, If my counselor could not help me, s/he knew someone that could.
41. SD, D, N, A, SA, My counselor is sensitive to my personal needs.
42. SD, D, N, A, SA, My counselor knows how to help me get a job after high school.
43. SD, D, N, A, SA, My counselor knows my parent(s) or guardian(s)
44. SD, D, N, A, SA, My counselor respects and listens to my opinion.
45. SD, D, N, A, SA, I expect my counselor to make sure that I receive the help I need.
46. SD, D, N, A, SA, My counselor expects me to take challenging courses.
47. SD, D, N, A, SA, My counselor can manage the school bureaucracy in order to help me.
48. SD, D, N, A, SA, I do not expect my counselor to be a good role model.
49. SD, D, N, A, SA, I expect my counselor to reach out to me in order to help.
50. SD, D, N, A, SA, I trust my counselor to help me when making important decisions.
51. SD, D, N, A, SA, My counselor can help me find an internship.
52. SD, D, N, A, SA, My counselor expects me to make smart decisions.
53. SD, D, N, A, SA, My counselor is fair.
54. SD, D, N , A, SA, My counselor knows my teachers.
55. SD, D, N, A, SA, My counselor knows the financial aid process.
56. SD, D, N, A, SA, My counselor expects me to reach high when setting future goals.
57. SD, D, N, A, SA, I can count on my counselor for help when I need it.
58. SD, D, N, A, SA, I do not have a personal relationship with my counselor.
59. SD, D, N, A, SA, I expect my counselor to make sure that I get the help that I need from school.
60. SD, D, N, A, SA, I expect my counselor to take an interest in my well-being.
61. SD, D, N, A, SA, I expect my counselor to work to ensure my success after high school.
62. SD, D, N, A, SA, I learned good study habits from my counselor.
63. SD, D, N, A, SA, I learned how to make plans for after high school from my counselor.
64 .SD, D, N, A, SA, I do not expect my counselor to monitor my school progress.
65. SD, D, N, A, SA, My counselor knows what colleges are a good match for me.
66. SD, D, N, A, SA, My parent(s) or guardian(s) feel comfortable calling my counselor.
67. SD, D, N, A, SA, I trust my counselor to give me good advice.

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